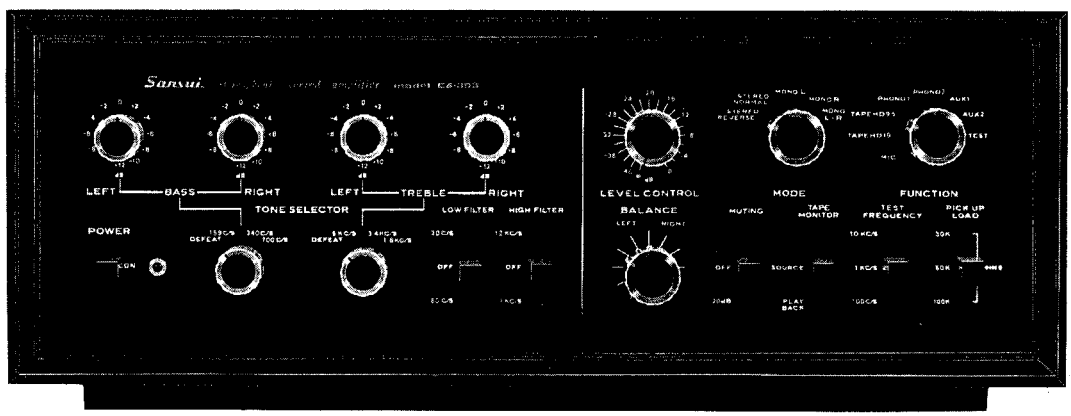
SERVICE MANUAL

STEREOPHONIC CONTROL AMPLIFIER

SANSUI CA-303



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HOW TO USE THIS SERVICE MANUAL

1. Look up the type of trouble you are confronted with in either the General or Troubleshooting charts provided in this manual from pp 2–10.
2. By referring to the charts, isolate the trouble to a particular unit or part. (See the column titled "What to Do" in the General Chart and "Check Point" in the Troubleshooting Chart.)
3. Locate the section of the chassis (Parts Layout pp 11, 12) in which the parts is located by using the co-ordinates (Column D) in the Parts List pp 23–26.
4. Using the co-ordinates given in the Parts List (Column C), pinpoint the position of the parts in the Schematic Diagram of Circuits, pp 13, 14.

NOTE: Much of the information contained in this manual has been prepared for use by qualified service repairmen. Please read your Warranty thoroughly before attempting any internal adjustments on your own.

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GENERAL CHART

If the amplifier is not operating satisfactorily, the trouble may be attributed to any of the following:

1. Loose terminal contact or incorrect connections of components;
2. Incorrect operation of component or components;
3. Improper placement of components, such as speakers and record player;
4. Defective component or components connected to the CA-303.

If the cause of frouble is not found in any of the adove steps, the next steps to do are listed below:

PROGRAM SOURCE	SYMPTOM	PROBABLE CAUSE	WHAT TO DO
Tuner	A. Constant or intermittent noise heard at times or in a certain area	* Discharge or oscillation caused by electrical appliances, such as fluorescent lamp, TV set, D.C. motor, rectifier and oscillator * Insufficient antenna input due to thick reinforced concrete wall of building or long distance from station * Wave interference * Natural phenomena, such as atmospherics, statics, strays and thunderbolt	* Attach a noise limiter to the electrical appliance that causes such noise or attach it to the tuner. * Keep the tuner well away from the electrical appliance that causes such noise. * Install an outdoor antenna and ground the amp to raise the signal-to-noise ratio. * If the noise occurs at a certain frequency, attach a wave trap to the ANT. input. * Reverse the power cord plug/receptacle connections.
	B. During AM reception noise is heard at a particular time of a day, in a certain area or over part of dial.	* Field intensity of AM broadcast	* Install antenna for maximum antenna efficiency. * In some cases, the noise can be eliminated by grounding the amp or reversing the power cord plug/receptacle connections.
	C. High-frequency noise during AM reception	* Adjacent-channel interference or beat interference * TV set too close to the audio system	* Although such noise cannot be completely eliminated by the amp, it is advisable to turn the TREBLE controls to the minimum counterclockwise position possible and set the HIGH FILTER to 7KHz or 12KHz. * Keep the TV set well away from the audio system.
	D. Noisy during FM reception NOTE: FM reception is affected considerably by the conditions of transmission by stations, power and antenna efficiency. As a result, you may receive one station quite well while having difficulty in receiving another station.	* Insufficient antenna input	* Install antenna for maximum signal strength. * If this procedure does not prove effective, use an outdoor antenna designed exclusively for FM. * When you will use a TV antenna as a FM antenna with help of a divider, make sure the TV reception is not affected. * Excessive long antenna may rather cause a noise.
	E. An accompanying series of pops is heard during FM reception.	* Electrical noise produce by the ignition systems of automobile engines and other internal combustion engines	* Increase the height of antenna.

GENERAL CHART

PROGRAM SOURCE	SYMPTOM	PROBABLE CAUSE	WHAT TO DO
Tuner (Continued from the preceding page)	F. Noisy not during FM mono reception but during FM stereo.	* The service area of the FM stereo broadcast is only half as much as that of the FM mono.	* Install antenna for maximum signal strength. * Turn the TREBLE controls to the minimum counterclockwise position possible and set the HIGH FILTER to 7Kc/s or 12Kc/s.
Record player, tape recorder or deck	A. Hum or howl	* Record player placed directly on, or too close to the speaker box * Connecting wire not shielded * Loos terminal contact * Connecting cord too near to power cord, fluorescent lamp or other electrical appliances * Nearby amateur radio station or TV transmission antenna	* Place a cushion between player and enclosure or place them away from each other. * Use shielded wire. * Set the LOW FILTER to 30c/s or 60c/s. * Connecting cord should be as short as possible. * Don't emphasize bass tones excessively. * Consult the nearest Radio Regulatory Bureau
	B. Surface noise	* Worn or old record * Worn pick-up needle * Improper needle pressure * Worn or dusty playback head	* Turn the TREBLE controls properly from mid-position to left and/or set the HIGH FILTER to 7Kc/s or 12 Kc/s. * Replace needle or head.
Common to all program sources	C. The BALANCE control is not in mid-position when equal sound comes from left and right channels.	* Imperfections in program material, variations in speaker output and vagaries of room acoustics	* Turn the MODE switch to MONO L R and adjust the BALANCE control so that the sound originates at a point midway between speakers.

TROUBLESHOOTING CHART

COMMON TO ALL PROGRAM SOURCES

SYMPTOM	PROBABLE CAUSE		CHECK POINT
No output signal	A. No power	1. No power comes to the power source.	
		2. Defective POWER switch	S_{13}
		3. Defective line cord	
		4. Blown fuse	F_{001}
		5. If the fuse should blow out as soon as it is replaced, the trouble may be attributed to:	
		a. Shorted power transformer;	T_{001}
		b. Shorted electrolytic capacitor	C_{057}
		c. Shorted d.c. power supply circuit	d.c. power supply circuit Use a tester
		d. Shorted diode	D_{001}~D_{008}
		6. Disconnected power transformer	T_{001}
	B. Defective power circuit	Measured voltage differs from voltage specified in Circuit Diagram.	Measure voltage in power circuit and replace defective element.
	C. Defective low-frequency circuit	1. Measured voltage differs from voltage specified in Circuit Diagram.	Measure voltage in low-frequency circuit and replace defective element.
		2. Defective tuve	V_{701}~V_{706}
		3. Shorted electolytic capacitor	C_{056}~C_{064}
	D. Error in operation	TAPE MONITOR switch remains in PLAYBACK position.	Turn TAPE MONITOR switch to SOURCE.
Weak output signal	A. Defective power circuit	Measured voltage differs from voltage specified in Circuit Diagram.	Measure voltage in power circuit and replace defective element.
	B. Defective low-frequency circuit	1. Measured voltage differs from voltage specified in Circuit Diagram.	Measure voltage in low-frequency circuit and replace defective element.
		2. Capacitor, poor capacitance or shorted	C_{701}~C_{704}, C_{729}, C_{730}, C_{739}, C_{740}, C_{749}, C_{750}
		3. Weak tube	V_{701}~V_{706}
Distortion	A. Defective power circuit	Measured voltage differs from voltage specified in Circuit Diagram.	Measure voltage in power circuit and replace defective element.
	B. Defective low-frequency circuit	1. Measured voltage differs from voltage specified in Circuit Diagram.	Measure voltage in low-frequency circuit and replace defective element.
		2. Weak tube	V_{701}~V_{706}
		3. Defective resistor	R_{739}, R_{740} and others.

TROUBLESHOOTING CHART

COMMON TO ALL PROGRAM SOURCES (cont'd)

SYMPTOM	PROBABLE CAUSE		CHECK POINT
Hum	A. Defective power circuit	Poor capacitance of electrolytic capacitor	C_{056}~C_{064}
	B. Defective low-frequency circuit	Weak tube	V_{701}~V_{706}
Noisy	A. Defective power circuit	Measured voltage differs from voltage specified in Circuit Diagram.	Measure voltage in power circuit and replace defective element.
	B. Defective low-frequency circuit	1. Weak tube 2. Fixed resistor, defective 3. Defective capacitor	V_{701}~V_{706} R_{705}, R_{706}, R_{711}, R_{712}, R_{771}, R_{772} C_{701}~C_{704}, C_{729}, C_{730}, C_{739}, C_{740}, C_{749}, C_{750}
LOW FILTER switch does not work at all.	A. Defective low filter circuit B. Defective switch		LF-1 (C_{731}~C_{738}, R_{759}, R_{760}) S_{11a}, S_{11b}
HIGH FILTER switch does not work at all.	A. Defective high-filter circuit B. Defective switch		HF-1 (C_{741}~C_{744}), HF-2 (C_{745}~C_{748}) R_{765}~R_{768} S_{12a}, S_{12b}
MUTING switch does not work at all.	A. Defective muting circuit B. Defective switch		R_{701}, R_{702} $S_{6a, 6b}$
TEST FREQUENCY switch does not work at all.	A. Oscillation frequency switching circuit defective B. Defective switch		C_{047}~C_{052}, R_{073}, R_{078} S_3
PICK-UP LOAD switch does not work at all.	A. Pick-up load circuit defective B. Defective switch		PU-R (R_{603}~R_{614}) $S_{2a, 2b}$
TONE CONTROL does not work at all.	A. Tone control circuit defective B. Defective switch		R_{713}~R_{758} S_{8a}~$_{8d}$, S_{10a}~$_{10d}$
TONE SELECTOR switch does not work at all.	A. Tone selector circuit defective B. Defective switch		C_{705}~C_{728} S_{7a}~$_{7d}$, S_{9a}~$_{9d}$

PROGRAM SOURCE: RECORD PLAYER USING MAGNETIC CARTRIDGE, TAPE DECK OR MICROPHONE

SYMPTOM	PROBABLE CAUSE		CHECK POINT
No output signal	A. Record player, tape deck or microphone defective		Check each component connected to CA-303.
	B. Trouble common to all program sources		See "CONTROL AMP TROUBLE-SHOOTING CHART: Common to All Program Sources".
	C. Equalizer amplifier defective	1. Measured voltage differs from voltage specified in Circuit Diagram.	Measure voltage in equalizer amplifier and replace defective element.
		2. Capacitor, shorted or open	C_{601}, C_{602}, C_{605}, C_{606}, C_{611}, C_{612}
		3. Defective resistor	R_{612}, R_{613}, R_{627}~R_{630}, R_{633}, R_{634}
		4. Defective tube	V_{601}~V_{606}
		5. Bad contact at rotary switch	S_{1a}~$_{1e}$, S_{1g}~$_{1k}$
		6. Loose contact at input terminals or pin jacks	
Weak output signal	A. Record player, tape deck or microphone defective		Check each component connected to CA-303.
	B. Trouble common to all program sources		See the column "Weak output signal" in the troubleshooting chart "Common to All Program Sources".
	C. Equalizer amplifier defective	1. Measured voltage differs from voltage specified in Circuit Diagram.	Measure voltage in equalizer amplifier and replace defective element.
		2. Weak capacitor	C_{603}, C_{604}, C_{625}, C_{626}
		3. Weak tube	V_{601}~V_{606}
		4. Bad contact at rotary switch	S_{1a}~$_{1e}$, S_{1g}~$_{1k}$
		5. Loose contact at input terminals or pin jacks	
Distortion	A. Program source defective		Check each component connected to CA-303.
	B. Trouble common to all program sources		See the column "Distortion" in the troubleshooting chart: "Common to All Program Sources".
	C. Equalizer amplifier defective	1. Measured voltage differs from voltage specified in Circuit Diagram.	Measure voltage in equalizer amplifier and replace defective element.
		2. Weak capacitor	C_{603}, C_{604}, C_{605}, C_{606}, C_{609}~C_{618}
		3. Weak tube	V_{601}~V_{606}
		4. Defective resistor	R_{615}~R_{632}, R_{635}~R_{648}
Hum	A. Program source defective		Check each component connected to CA-303.
	B. Trouble is not in CA-303.	Incorrect or improper connections	

TROUBLESHOOTING CHART

PROGRAM SOURCE : RECORD PLAYER USING MAGNETIC CARTRIDGE, TAPE DECK OR MICROPHONE (cont'd)

SYMPTOM	PROBABLE CAUSE		CHECK POINT
Hum (Continued from the preceding page	C. Trouble common to all program sources		See the column "Hum" in the troubleshooting chart: "Common to All Program Sources".
	D. Equalizer amplifier defective	Weak tube	V_{601}~V_{606}
Noisy	A. Program source defective		Check each component connected to CA-303.
	B. Trouble is not in CA-303.		See the TROUBLESHOOTING AUDIO SYSTEM.
	C. Trouble common to all program sources		See the column "Noisy" in the troubleshooting chart: "Common to All Program Sources".
	D. Equalizer amplifier defective	1. Weak tube	V_{601}~V_{606}
		2. Fixed resistor defective	R_{621}, R_{622}, R_{627}, R_{628}, R_{629}, R_{630}, R_{633}, R_{634}
		3. Weak capacitor	C_{605}, C_{606}, C_{611}, C_{612} and others

PROGRAM SOURCE: OTHERS

SYMPTOM	PROBABLE CAUSE	CHECK POINT
Tuner and other components connected to AUX inputs of CA-303 don't work well.	1. Program source defective 2. Incorrect or improper connections	Check and repair or replace.
Tape recorder connected to CA-303 does not play well.	1. Program source defective 2. Incorrect or improper connections	Check and repair or replace. See the troubleshooting chart on "Common to All Program Sources".
Broadcast recording in not well done.	1. Defective tuner 2. Defective tape or recorder 3. Incorrect or improper connections	Check and repair or replace.
Disc, tape and other sources connected to AUX inputs of CA-303 are not well recorded on tape.	1. Defective tape or recorder 2. Incorrect or improper connections 3. Defective record player or worn record 4. Defective AUX inputs 5. Equalizer amp section defective	Check and repair or replace. See preceding chart.

CHANNEL DIVIDER TROUBLE SHOOTING CHART

SYMPTOM	PROBABLE CAUSE		CHECK POINT
No output signal over all filter pass bands	A. Power circuit defective	Measured voltage differs from voltage specified in Circuit diagram.	Measure voltage in power circuit and replace defective element.
	B. Filter amp defective	1. Measured voltage differs from voltage specified in Circuit Diagram.	Measure voltage in filter amp and replace defective element.
		2. Electrolytic capacitor shorted	Check each element for abnormal voltage.
		3. Defective transistor	Check TR_{001} and TR_{002} for abnormal voltage
	C. Improper or incorrect input connections		
No output signal over high - pass filter band	A. High-pass filter amp defective	1. Measured voltage differs from voltage specified in Circuit Diagram.	Measure voltage in high-pass filter amp and replace defective element.
		2. Defective transistor	Check TR_{003}~TR_{006} for abnormal voltage.
	B. Improper or incorrect output connections		
No output signal over medium-pass filter band	A. Medium-pass filter amp defective	1. Measured voltage differs from voltage specified in Circuit Diagram.	Measure voltage in medium-pass filter amp and replace defective element.
		2. Defective transistor	Check TR_{007}~TR_{014} for abnormal voltage.
	B. Improper or incorrect output connections		
No output signal over low-pass filter band	A. Low-pass filter amp defective	1. Measured voltage differs from voltage specified in Circuit Diagram.	Measure voltage in low-pass filter amp and replace defective element
		2. Defective transistor	Check TR_{015}~TR_{018} for abnormal voltage
	B. Improper or incorrect output connections		
Weak output signal over all filter pass bands	A. Power circuit defective	Measured voltage differs from voltage specified in Circuit Diagram.	Measure voltage in power circuit and replace defective element.
	B. Buffer amp defective	1. Measured voltage differs from voltage specified in Circuit Diagram.	Measure voltage in buffer amp and replace deffective element.
		2. Transistor aging	TR_{001}, TR_{002}
Weak output signal over high-pass filter band	A. High-pass filter amp defective	1. Measured voltage differs from voltage specified in Circuit Diagram.	Measure voltage in high-pass filter amp and replace defective element.
		2. Transistor aging	TR_{003}~TR_{006}

TROUBLESHOOTING CHART

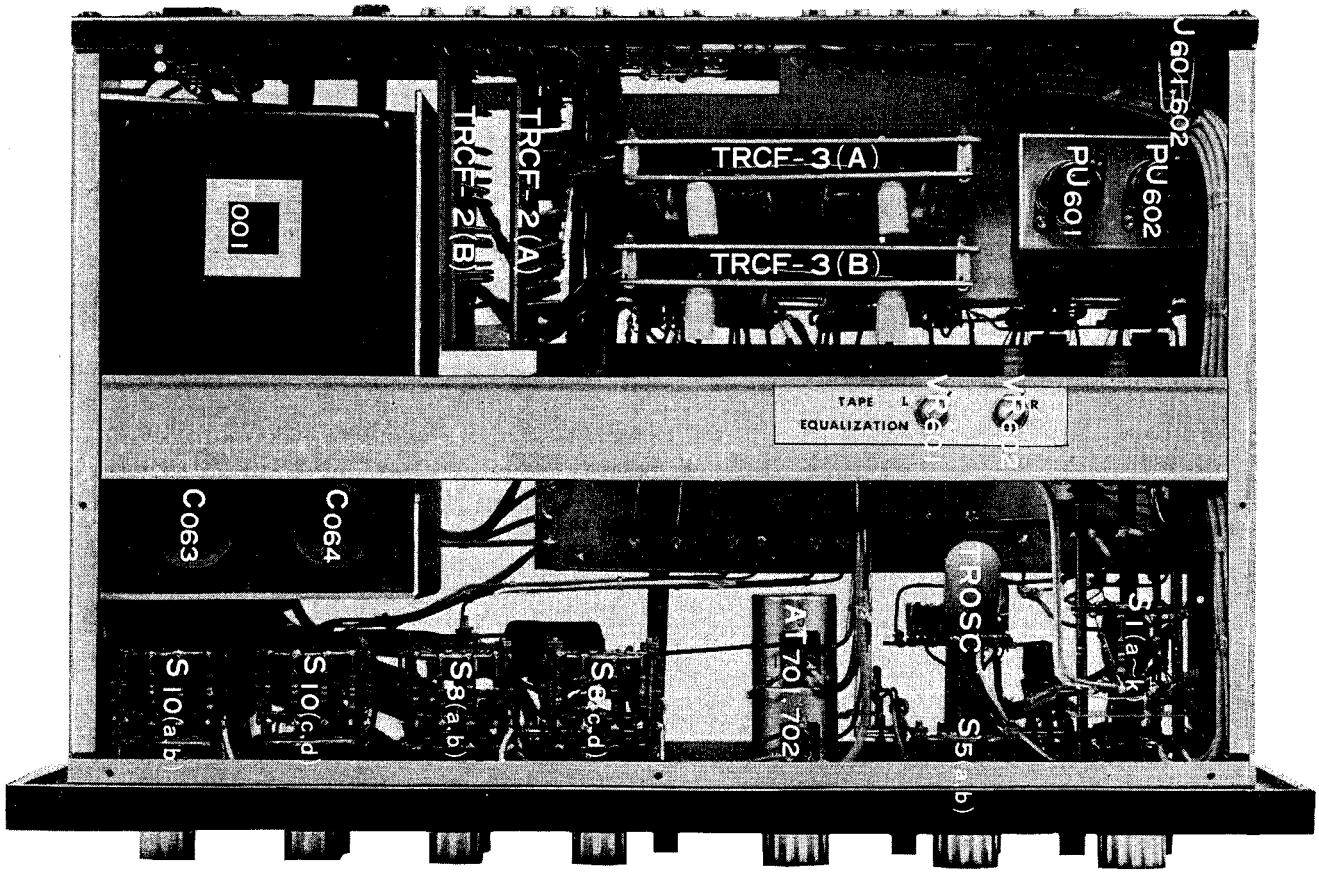
CHANNEL DIVER TROUBLESHOOTING CHART (cont'd)

SYMPTOM	PROBABLE CAUSE		CHECK POINT
Weak output signal over medium-pass filter band	A. Medium-pass filter amp defective	1. Measured voltage differs from voltage specified in Circuit Diagram. 2. Transistor aging	Measure voltage in medium-pass filter amp and replace defective element. TR_{007}~TR_{014}
Weak output signal over low-pass filter band	A. Low-pass filter amp defective	1. Measured voltage differs from voltage specified in Circuit Diagram. 2. Transistor aging	Measure voltage in low-pass filter amp and replace defective element. TR_{015}~TR_{018}
Distortion over all filter pass band	A. Power circuit defective	Measured voltage differs from voltage specified in Circuit Diagram.	Measure voltage in power circuit and replace defective element.
	B. Buffer amp defective	1. Measured voltage differs from voltage specified in Circuit Diagram. 2. Transistor aging	Measure voltage in buffer amp and replace defective element. TR_{001}, TR_{002}
Distortion over high-pass filter band	A. High-pass filter amp defective	1. Measured voltage differs from voltage specified in Circuit Diagram. 2. Transistor aging	Measure voltage in high-pass filter amp and replace defective element. TR_{003}~TR_{006}
Distortion over medium-pass filter band	A. Medium-pass filter amp defective	1. Measured voltage differs from voltage specified in Circuit Diagram. 2. Transistor aging	Measure voltage in medium-pass filter amp and replace defective element. TR_{007}~TR_{014}
Distortion over low-pass filter band	A. Low-pass filter amp defective	1. Measured voltage differs from voltage specified in Circuit Diagram. 2. Transistor aging	Measure voltage in low-pass filter amp and replace defective element. TR_{015}~TR_{018}
Hum over all filter pass bands	A. Power circuit defective	Poor capacitance of electrolytic capacitor	C_{063}, C_{065}, C_{066}
	B. Filter amp defective C. Improper or incorrect input connections	Poor capacitance of electrolytic capacitor	C_{023}, C_{024}, C_{045}, C_{046}
Noisy over all filter pass band	A. Power circuit defective	Measured voltage differs from voltage specified in Circuit Diagram.	Measure voltage in power circuit and replace defective element.
	B. Buffer amp defective	Transistor aging	TR_{001}, TR_{002}
Noisy over high-pass filter bands	A. High-pass filter amp defective	1. Transistor aging 2. Output volume defective	TR_{003}~TR_{006} VR_{003}, VR_{004}
Noisy over medium-pass filter band	A. Medium-pass filter amp defective	1. Transistor aging 2. Output volume defective	TR_{007}~TR_{014} VR_{001}, VR_{002}

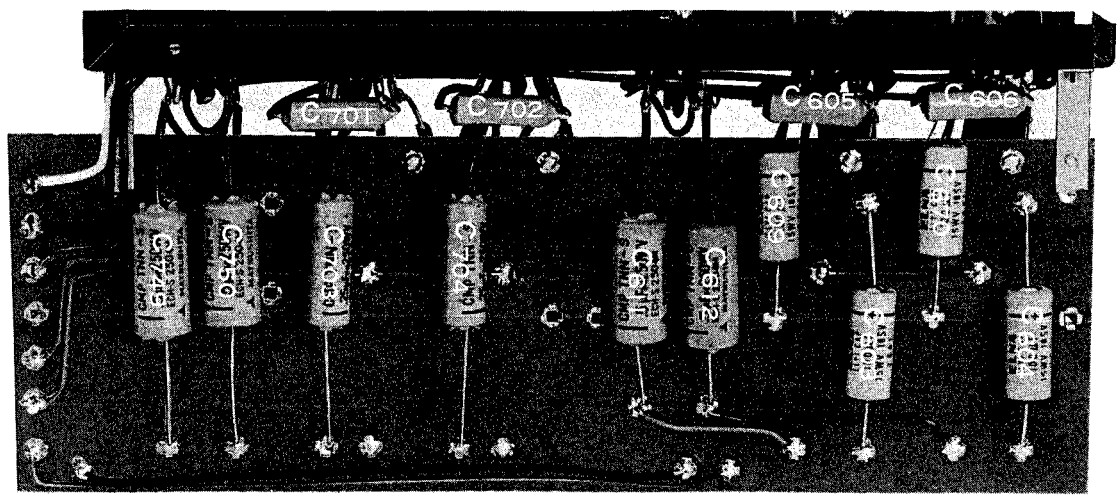
SYMPTOM	PROBABLE CAUSE		CHECK POINT
Noisy over low-pass filter band	A. Low-pass filter amp defective	1. Transistor aging 2. Output volume defective	TR_{015}~TR_{018} VR_{005}, VR_{006}
Frequency is not divided at all.	A. Plug-in unit defective	1. Defective capacitor 2. Defective resistor 3. Multi-connector not connected properly	C_{005}~C_{010}, C_{013}~C_{018}, C_{025}~C_{030}, C_{035}~C_{040} R_{013}, R_{014}, R_{027}, R_{028} R_{041}, R_{042}, R_{059}, R_{060}
	B. Refer to the column on defective filter amp.		
Frequency is not divided at cross-over between high and mid-ranges	A. Plug-in unit defective	1. Defective capacitor 2. Defective resistor 3. Multi-connector not connected properly	C_{005}~C_{010}, C_{013}~C_{018} R_{013}, R_{014}, R_{027}, R_{028}
	Refer to the columns on defective high-and medium-pass filter amplifiers.		
Frequency is not divided at cross-over between-mid and low ranges.	A. Plug-in unit defective	1. Defective capacitor 2. Defective resistor 3. Multi-connector not connected properly	C_{025}~C_{030}, C_{035}~C_{040} R_{041}, R_{042}, R_{059}, R_{060}
	Refer to the columns on defective mid- and low-pass filter amplifier		

PARTS LAYOUT

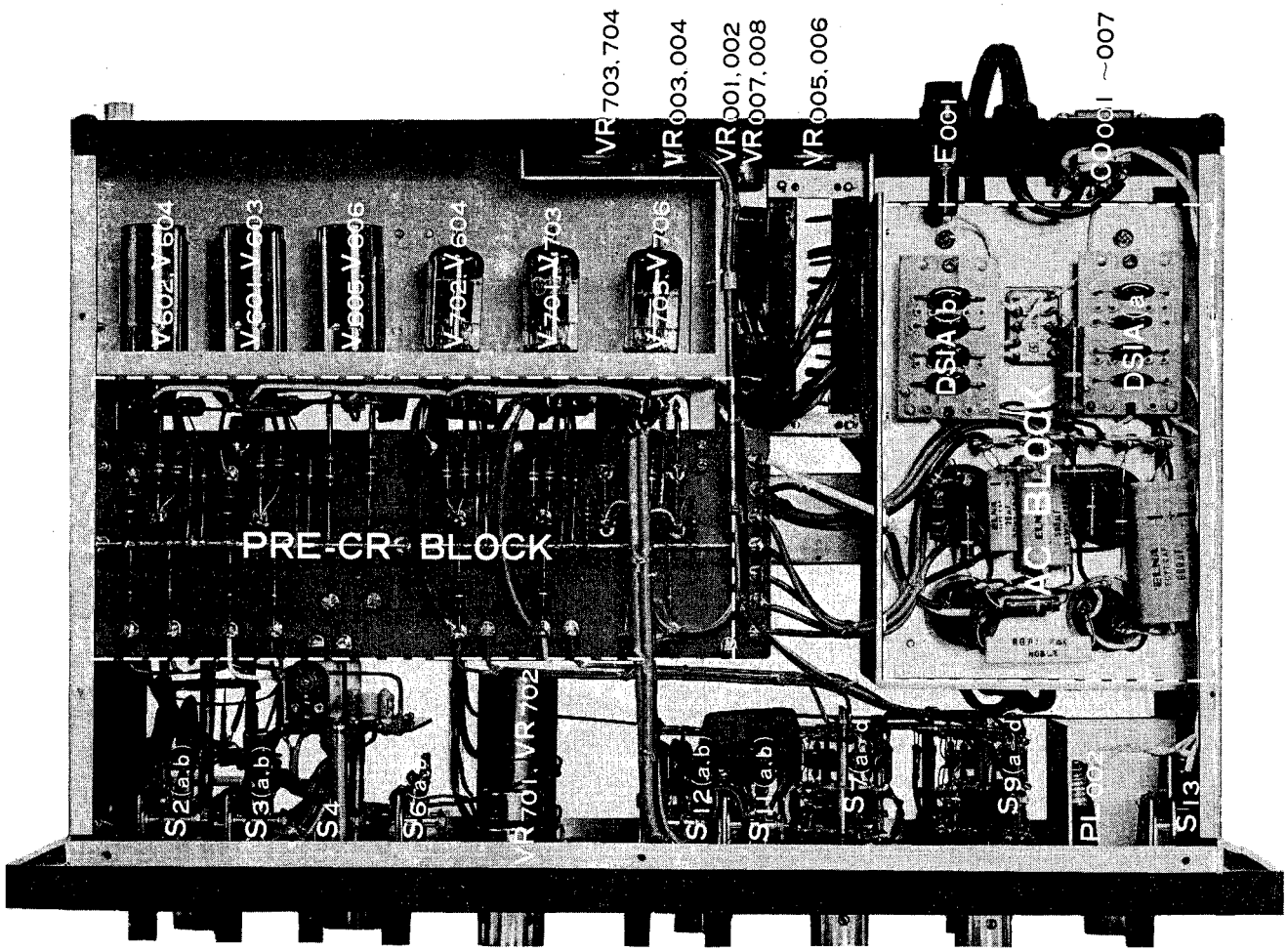
UPPER SECTION OF AMPLIFIER



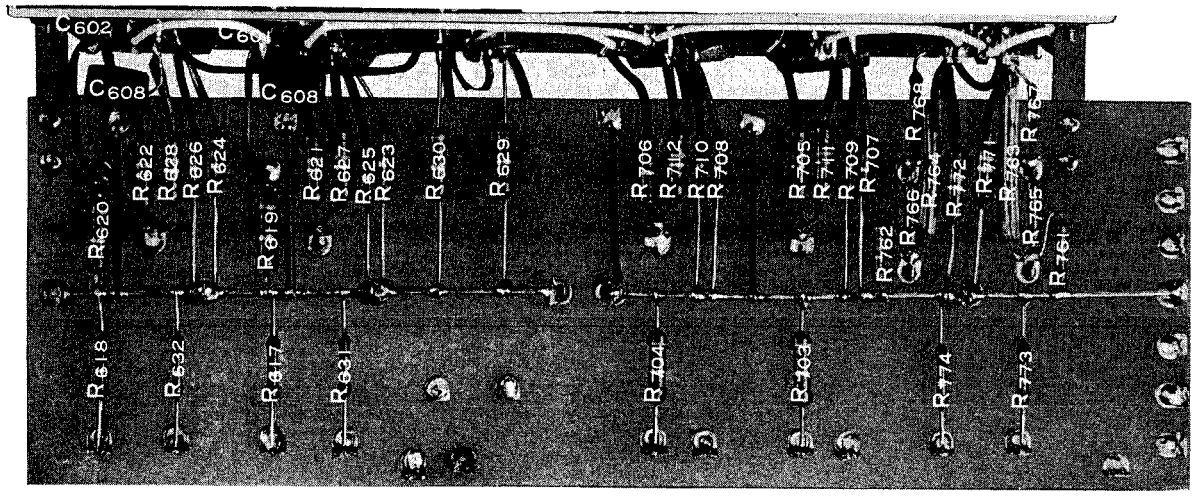
PRE-CR BLOCK (A)



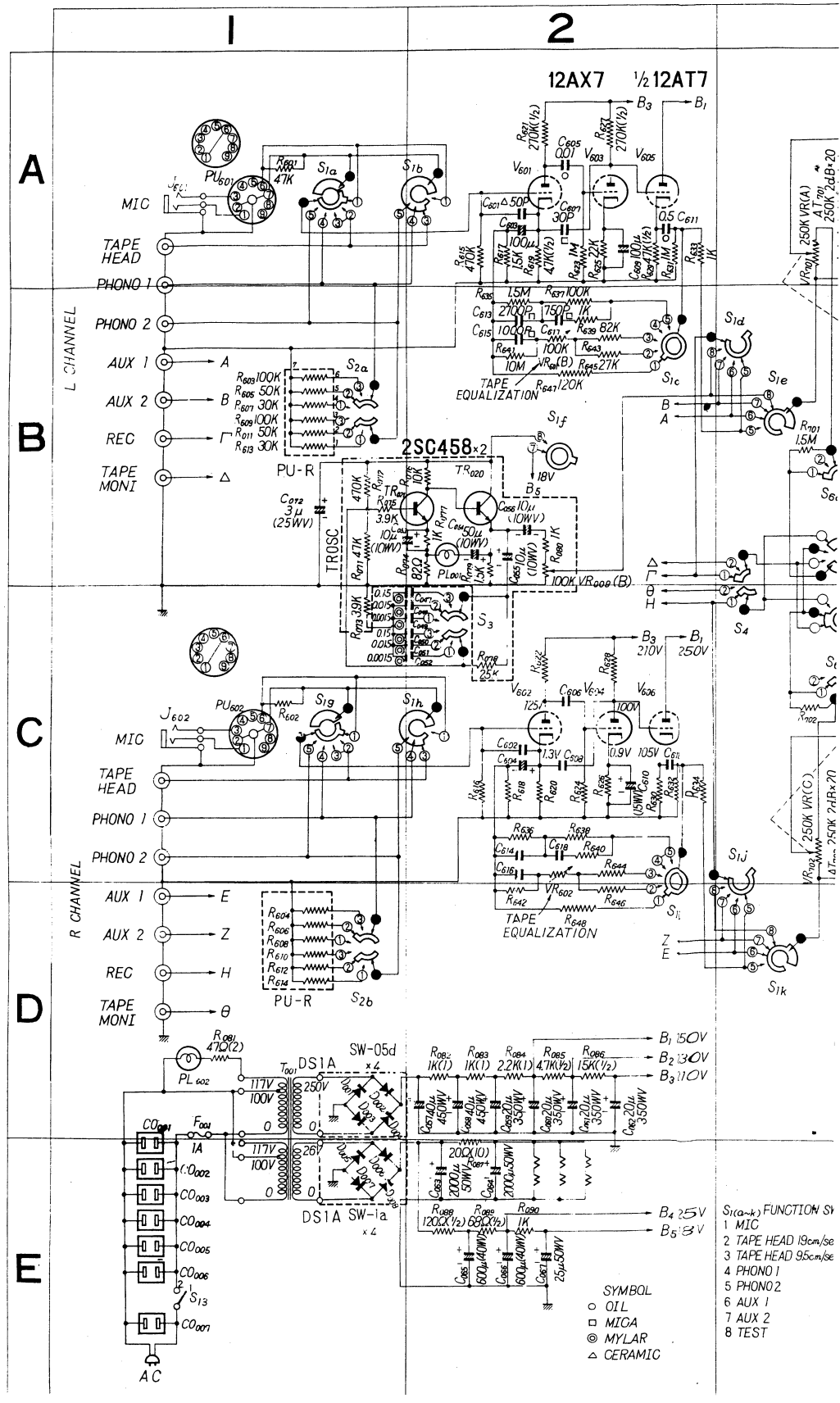
LOWER SECTION OF AMPLIFIER

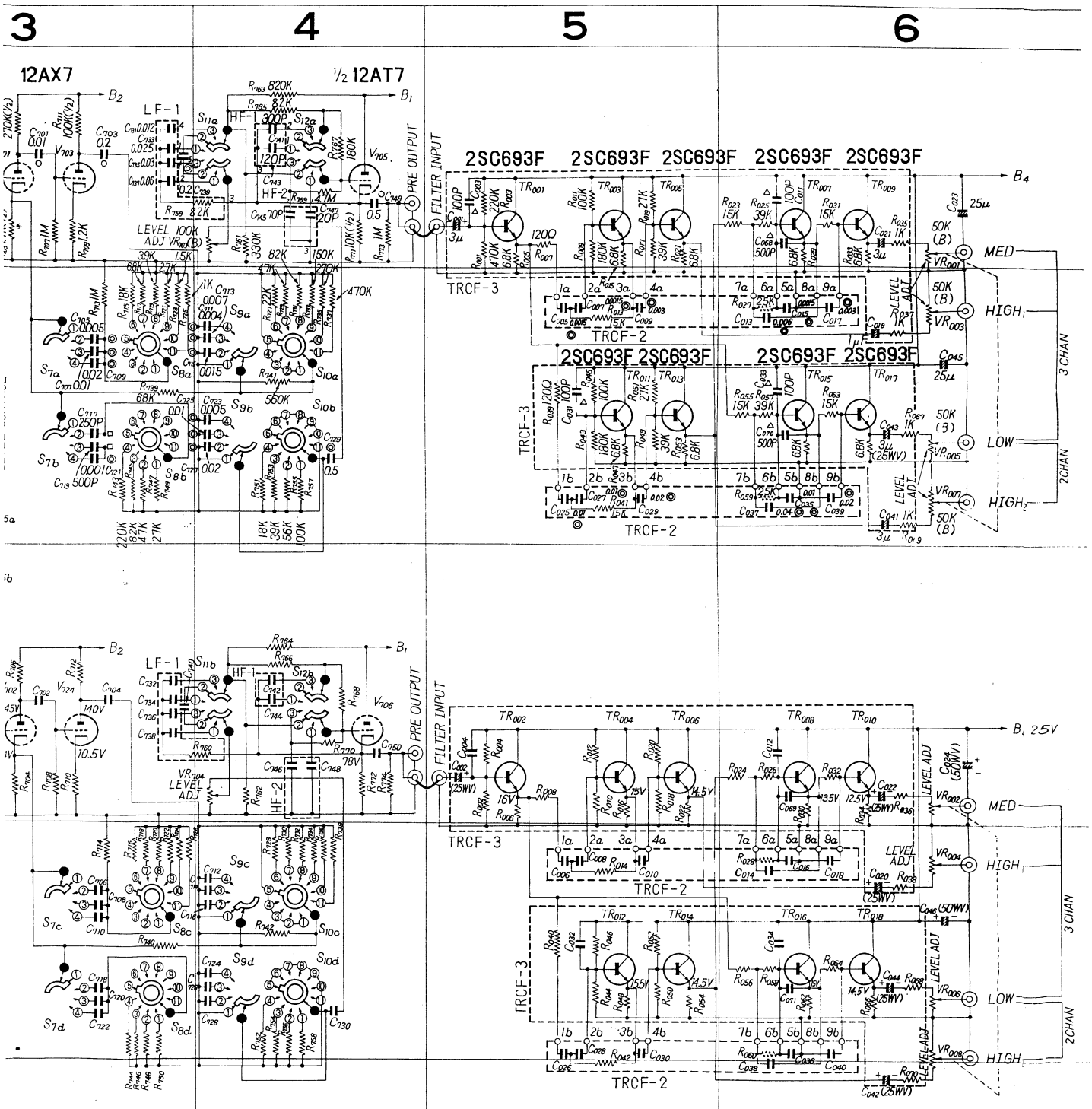


PRE-CR BLOCK (B)



CIRCUIT DIAGRAM





$S_{1(a\sim b)}$ PICKUP LOAD SW
1 30KΩ
2 50KΩ
3 100KΩ

S_3 TEST FREQUENCY SW
1 10kc
2 1kc
3 100c/s

S_4 TAPE MONITOR SW
1 SOURCE
2 PLAY BACK

$S_{5(a\sim b)}$ MODE SW
1 STEREO REVERSE
2 STEREO NORMAL
3 MONO L
4 MONO R
5 MONO L+R

$S_{6(a\sim b)}$ MUTING SW
1 OFF
2 -20dB

$S_{7(a\sim d)}$ TONE SELECTOR
1 DEFEAT
2 6kc
3 3.4kc
4 1.8kc

$S_{8(a\sim d)}$ TREBLE SW
1~4 CUT
5 FLAT
6~11 BOOST

$S_{9(a\sim d)}$ TONE SELECTOR
1 DEFEAT
2 159c/s
3 340c/s
4 700c/s

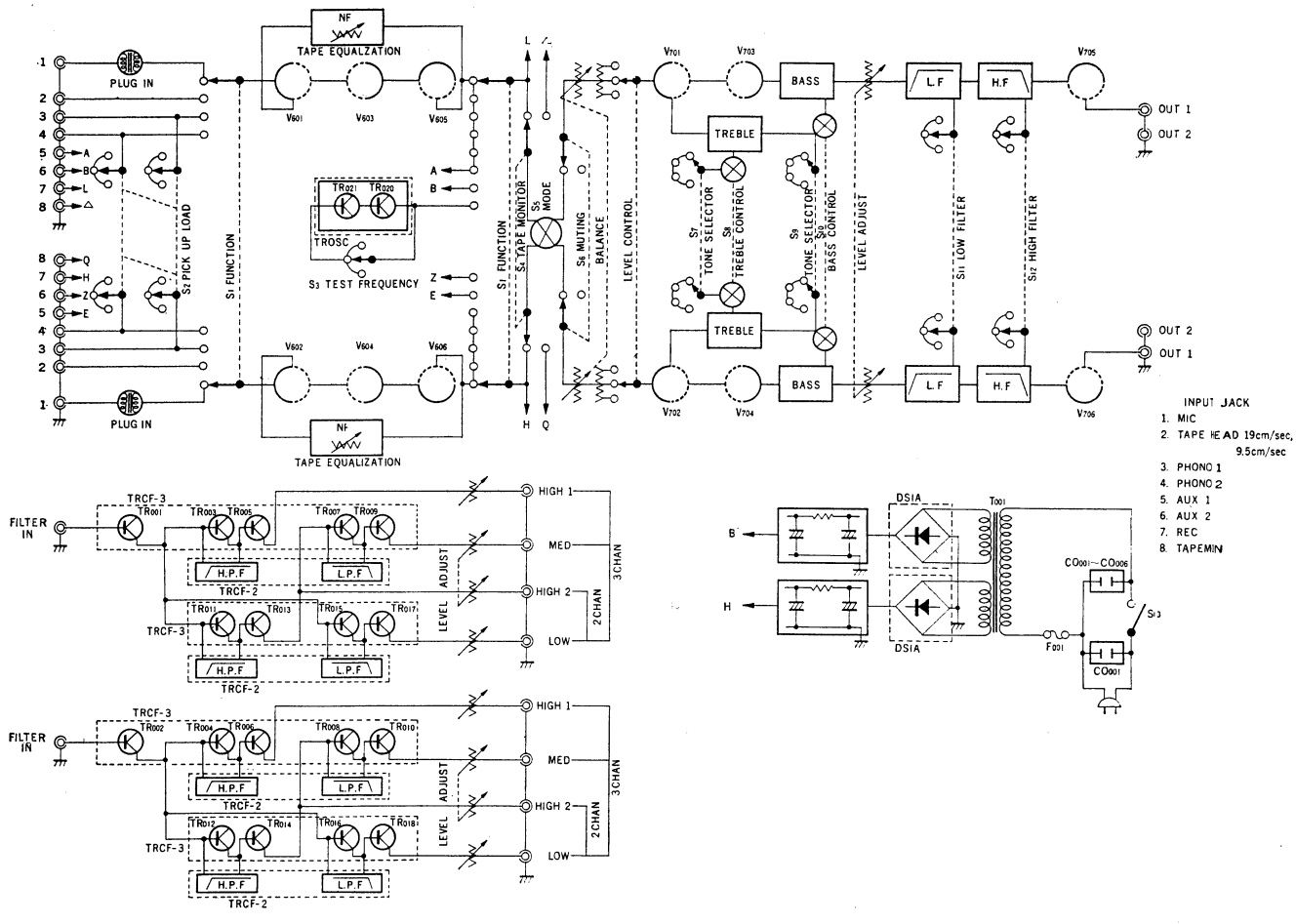
$S_{10(a\sim d)}$ BASS SW
1~4 CUT
5 FLAT
6~11 BOOST

$S_{11(a\sim b)}$ LOWFILTER SW
1 30c/s
2 OFF
3 60c/s

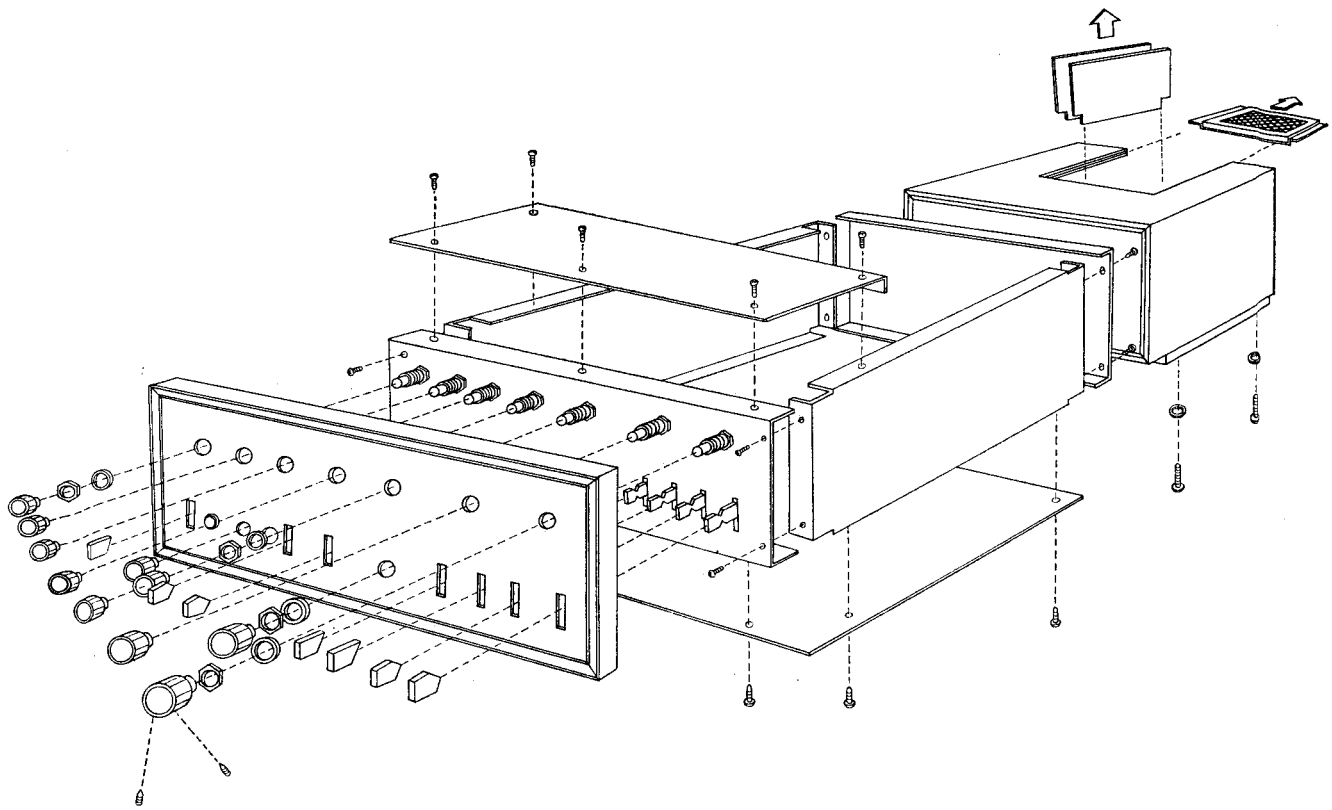
$S_{12(a\sim b)}$ HIGH FILTER SW
1 12kc
2 OFF
3 7kc

S_{13} POWER SW
1 OFF
2 ON

BLOCK DIAGRAM



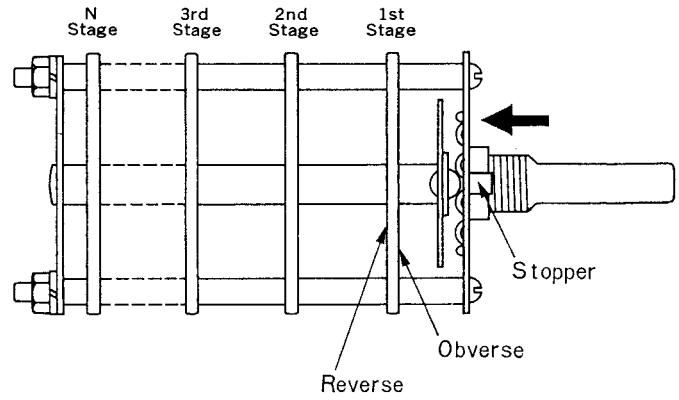
EXPLODED VIEW OF CA-303



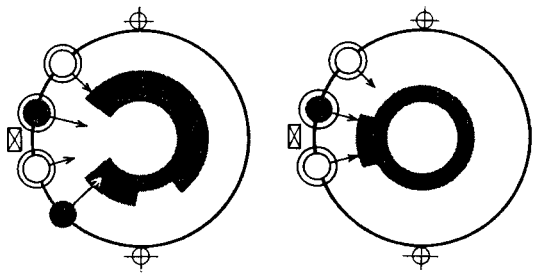
SELECTOR CHART

* The side view of the selector switch is given right.
* The selector switch viewed from the arrow side is given in Circuit Diagram.
* To replace or check the selector switch, refer to the diagrams below:

  ○ : Contact point;
  ● : Supporting point;
  △ : Repeating terminal;
  ◎ : Through type clip;
  ⊠ : Location of stopper.



MODE 〈1-Stage〉



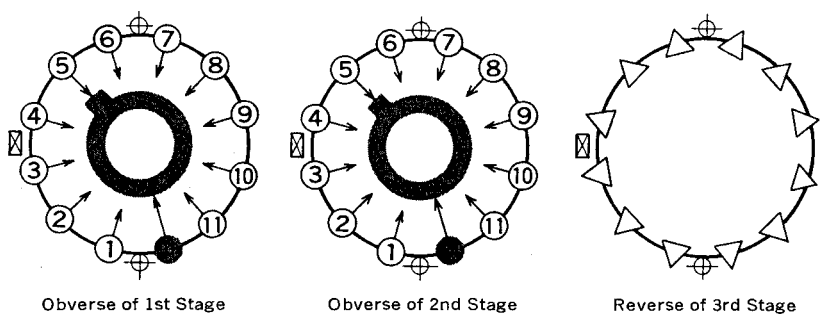
Obverse of 1st Stage　　Reverse of 1st Stage

Position of Switches in Circuit Diagram

〈S5 (a~b)〉

S_{5a}....3 B	1 STEREO REVERSE (Shown)
S_{5b}....3 C	2 STEREO NORMAL
	3 MONO L
	4 MONO R
	5 MONO L+R

TONE CONTROL BASS-TREBLE 〈3-Stage〉



Obverse of 1st Stage　　Obverse of 2nd Stage　　Reverse of 3rd Stage

Position of Switches in Circuit Diagram

BASS S8 (a~d)

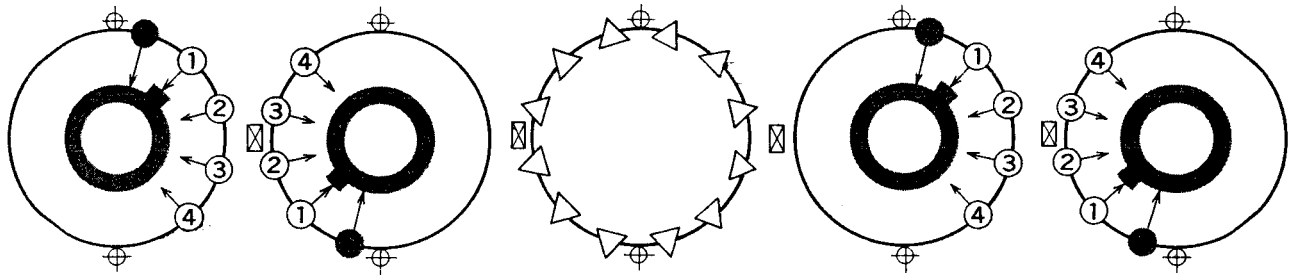
S_{10a}....4 B (2nd Stage)	1~4 CUT
S_{10b}....4 B (1st Stage)	5 FLAT (Shown)
S_{10c}....4 D (2nd Stage)	6~11 BOOST
S_{10d}....4 D (1st Stage)	

TREBLE 〈S10 (a~d)〉

S_{8a}....3 B (2nd Stage)	1~4 CUT
S_{8b}....3 B (1st Stage)	5 FLAT (Shown)
S_{8c}....3 D (2nd Stage)	6~11 BOOST
S_{8d}....3 D (1st Stage)	

SELECTOR CHART

TONE SELECTOR BASS-TREBLE 〈3-Stage〉



Obverse of 1st Stage | Reverse of 1st Stage | Obverse of 2nd Stage | Obverse of 3rd Stage | Reverse of 3rd Stage

Position of Switches in Circuit Diagram

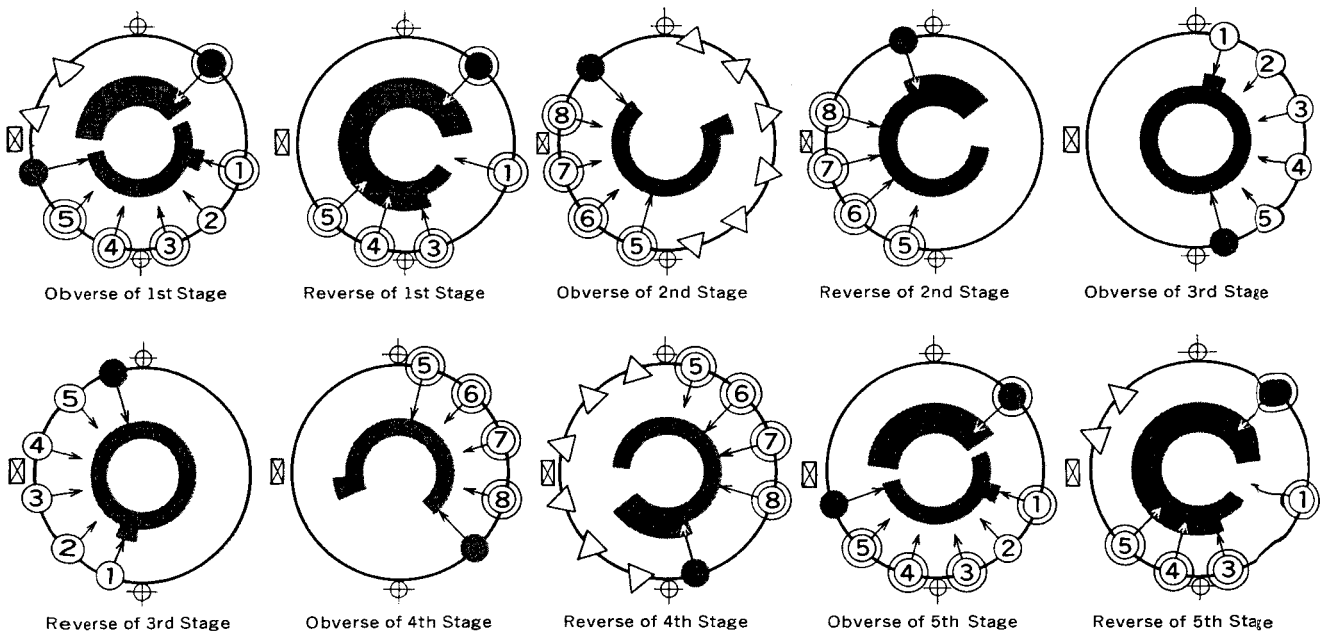
BASS 〈S9(a~d)〉

S_{9a}....4 B (3rd Stage, Reverse) 1 DEFEAT (Shown)
S_{9b}....4 B (1st Stage, Reverse) 2 159 Hz
S_{9c}....4 D (3rd Stage, Obverse) 3 340 Hz
S_{9d}....4 D (1st Stage, Obverse) 4 700 Hz

TREBLE 〈S7(a~d)〉

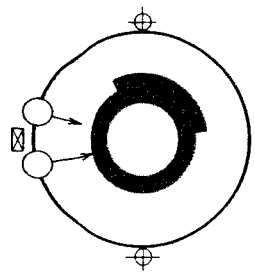
S_{7a}....3 B (3rd Stage, Reverse) 1 DEFEAT (Shown)
S_{7b}....3 B (1st Stage, Reverse) 2 6 KHz
S_{7c}....3 D (3rd Stage, Obverse) 3 3.4 KHz
S_{7d}....3 D (1st Stage, Obverse) 4 1.8 KHz

FUNCTION 〈6-Stage〉



Obverse of 1st Stage | Reverse of 1st Stage | Obverse of 2nd Stage | Reverse of 2nd Stage | Obverse of 3rd Stage

Reverse of 3rd Stage | Obverse of 4th Stage | Reverse of 4th Stage | Obverse of 5th Stage | Reverse of 5th Stage



Reverse of 6th Stage

Position of Switchs in Circuit Diagram

〈S_1 (a~k)〉

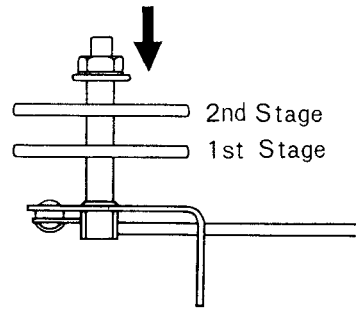
S_{1a}....1 A (1st Stage, Obverse)
S_{1b}....2 A (1st Stage, Reverse)
S_{1c}....2 B (3rd Stage, Obverse)
S_{1d}....3 B (2nd Stage, Obverse)
S_{1e}....3 B (2nd Stage, Reverse)
S_{1f}....2 B (6th Stage, Reverse)
S_{1g}....1 C (5th Stage, Obverse)
S_{1h}....2 C (5th Stage, Reverse)
S_{1i}....2 C (3rd Stage, Reverse)
S_{1j}....3 D (4th Stage, Obverse)
S_{1k}....3 D (4th Stage, Reverse)

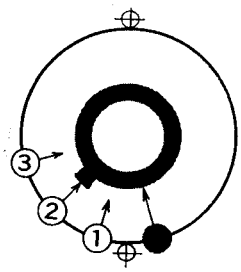
1 MIC (Shown) 6 AUX 1
2 TAPE HEAD 19cm/sec 7 AUX 2
3 TAPE HEAD 9.5cm/sec 8 TEST
4 PHONO 1
5 PHONO 2

SELECTOR CHART

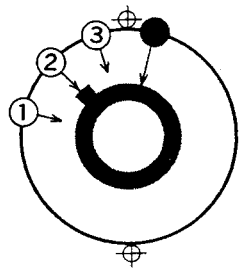
The side view of the lever switch is given right. Below are its cross-sectional views. To replace or repair the lever switch, refer to the diagrams below:

○ Contact point;
● Supporting Point;

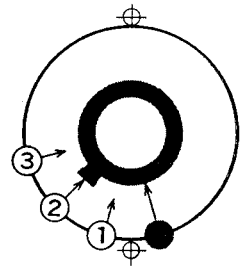




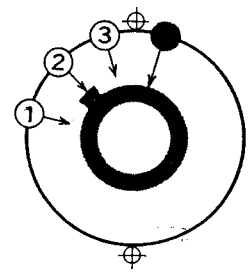
Obverse of 1st Stage



Reverse of 1st Stage



Obverse of 2nd Stage



Reverse of 2nd Stage

PICK UP LOAD 〈2-Stage〉

Position of Switches in Circuit Diagram

〈S_2 (a,b)〉

S_{2a}....4 B (2nd Stage)	1 30KΩ
S_{2d}....1 D (1 st Stage)	2 50KΩ (Shown)
	3 10KΩ

TEST FREQUENCY 〈2-Stage〉

Position of Switches in Circuit Diagram

〈S_2〉

S^3....2C (1st Stage)	1 10K Hz
2nd Stage is used as	2 1K Hz (Shown)
repeating terminals	3 100K Hz

LOW FILTER 〈2-Stage〉

Position of Switches in Circuit Diagram

〈S_{11} (a,b)〉 1 30C Hz

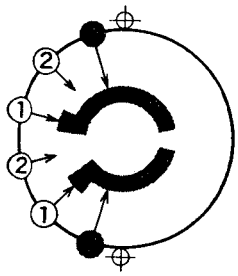
S_{11a}....4 A (Obverse of 1st Stage, Obverse of 2nd Stage)	2 OFF (Shown) 3 60 Hz
S_{11b}....4 C (Reverse of 1st Stage, Reverse of 2nd Stage)	

HIGH FILTER 〈2-Stage〉

Position of Switches in Circuit Diagram

〈S_{12} (a'b)〉 1 12K Hz

S_{12a}....4 A (Obverse of 1st Stage, Obverse of 2nd Stage)	2 OFF (Shown) 3 7K Hz
S_{12b}....4 C (Reverse of 1st Stage, Reverse of 2nd Stage)	



MUTING

Position of Switches in Circuit Diagram

〈S_6 (a,b)〉	1 OFF (Shown)
S_{6a}....3 B	2 −20dB
S_{6b}....3 C	

TAPE MONITOR

Position of Switches in Circuit Diagram

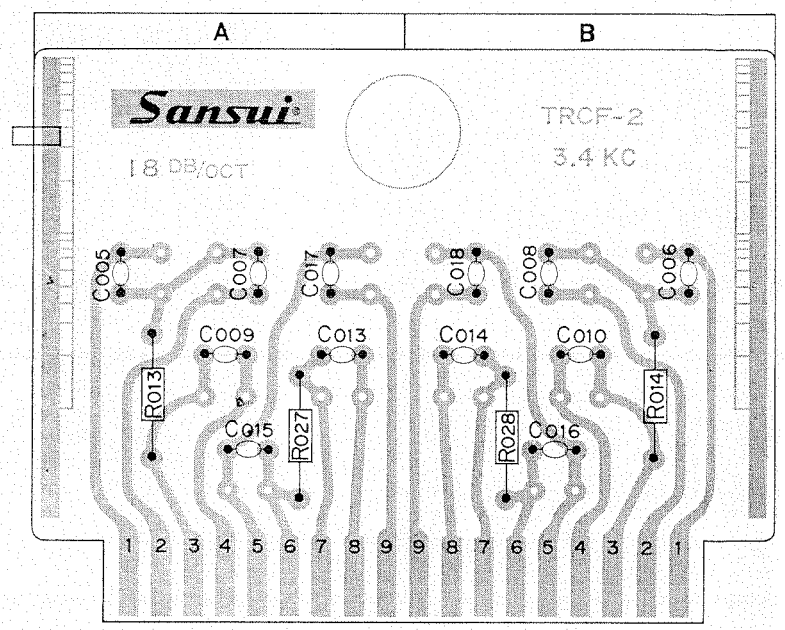
〈S_4〉	1 SOURCE (Shown)
S_4....3 B, C	2 PLAY BACK

PARTS LAYOUT IN PRINTED CIRCUITS

PLUG-IN UNIT (TRCF-2〈A〉)

POSITION OF PARTS IN CIRCUIT DIAGRAM

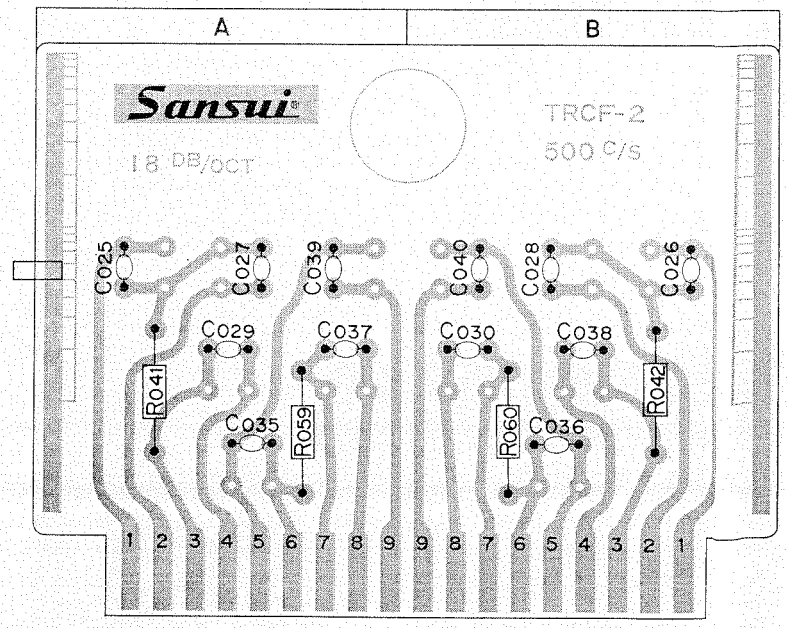
C005.... A	C016.... B
C006.... B	C017.... A
C007.... A	C018.... B
C008.... B	
C009.... A	R013.... A
C010.... B	R014.... B
C013.... A	R027.... A
C014.... B	R028.... B
C015.... A	



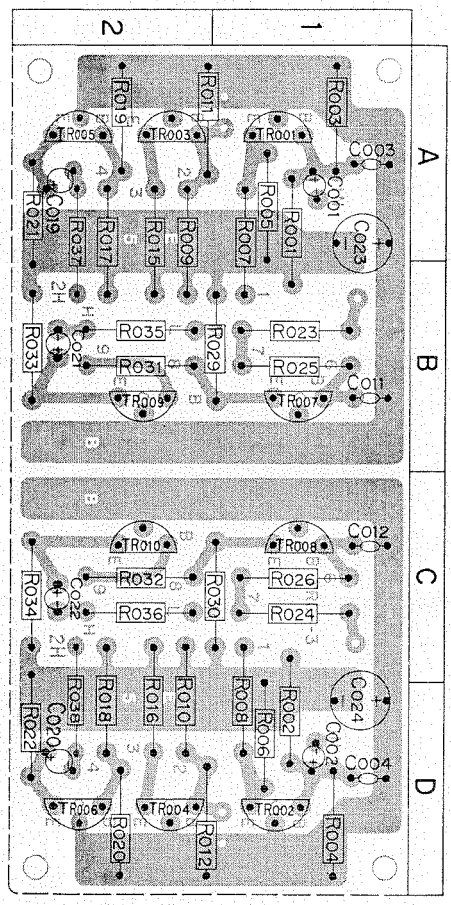
PLUG-IN UNIT (TRCF-2〈B〉)

POSITION OF PARTS IN CIRCUIT DIAGRAM

C025.... A	C038.... B
C026.... B	C039.... A
C027.... A	C040.... B
C028.... B	
C029.... A	R041.... A
C030.... B	R042.... B
C035.... A	R059.... A
C036.... B	R060.... B
C037.... A	



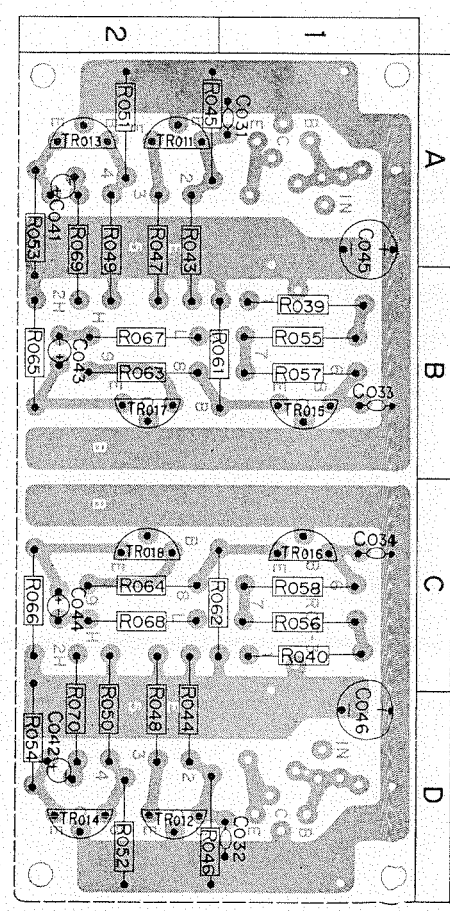
PARTS LAYOUT IN PRINTED CIRCUITS



FILTER AMP (TRCF-3〈A〉)

POSITION OF PARTS IN CIRCUIT DIAGRAM

R001....1A	R015....2A	R029....1B	C002....1D	TR001 ..1A
R002....1D	R016....2D	R030....1C	C003....1A	TR002 ..1D
R003....1A	R017....2A	R031....2B	C004....1D	TR003 ..2A
R004....1D	R018....2D	R032....2C	C011....1B	TR004 ..2D
R005....1A	R019....2A	R033....2B	C012....1C	TR005 ..2A
R006....1D	R020....2D	R034....2C	C019....2A	TR006 ..2D
R007....1A	R021....2A	R035....2B	C020....2D	TR007 ..1B
R008....1D	R022....2D	R036....2C	C021....2B	TR008 ..1C
R009....2A	R023....1B	R037....2A	C022....2C	TR009 ..2B
R010....2D	R024....1C	R038....2D	C023....1A	TR010 ..2C
R011....2A	R025....1B		C024....1D	
R012....2D	R026....1C	C001....1A		



FILTER AMP (TRCF-3〈B〉)

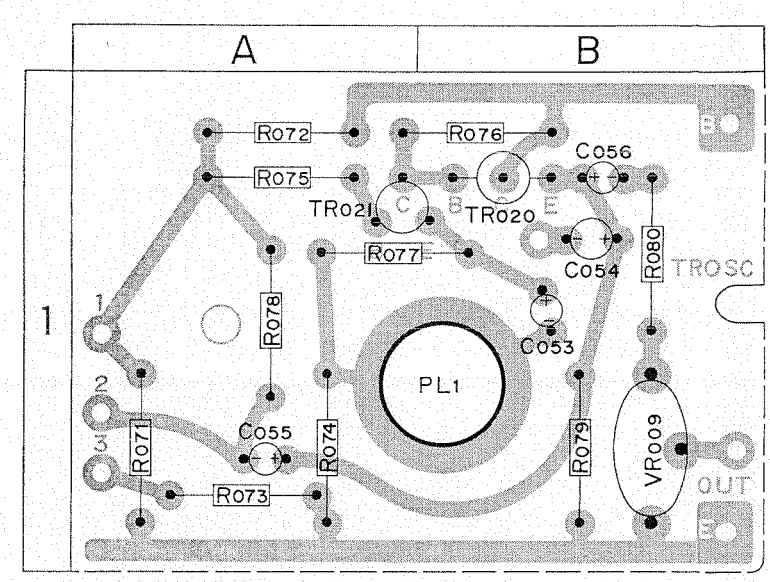
POSITION OF PARTS IN CIRCUIT DIAGRAM

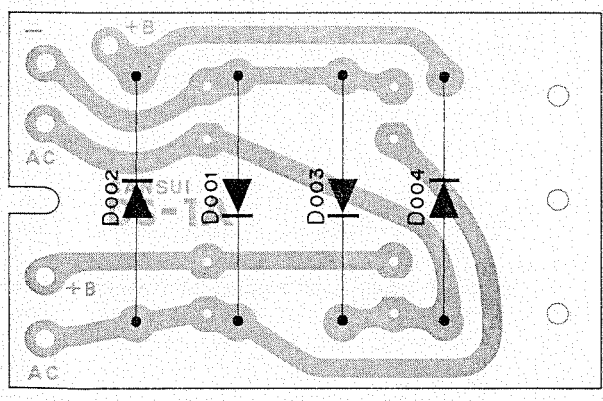
R039....1B	R051....2A	R063....2B	C032....1D	TR011 ..2A
R040....1C	R052....2D	R064....2C	C033....1B	TR012 ..2D
R043....2A	R053....2A	R065....2B	C034....1C	TR013 ..2A
R044....2D	R054....2D	R066....2C	C041....2A	TR014 ..2D
R045....2A	R055....1B	R067....2B	C042....2D	TR015 ..1B
R046....2D	R056....1C	R068....2C	C043....2B	TR016 ..1C
R047....2A	R057....1B	R069....2A	C044....2C	TR017 ..2B
R048....2D	R058....1C	R070....2D	C045....1A	TR018 ..2C
R049....2A	R061....1B		C046....1D	
R050....2D	R062....1C	C031....1A		

OSCILLATION BLOCK (TROSC)

POSITION OF PARTS IN CIRCUIT DIAGRAM

R071 . . . . 1 A	R079 . . . . 1 B	TR021 . . 1 A
R072 . . . . 1 A	R080 . . . . 1 B	TR022 . . 1 B
R073 . . . . 1 A		
R074 . . . . 1 A	C053 . . . . 1 B	PL001 . . 1 B
R075 . . . . 1 A	C054 . . . . 1 B	
R076 . . . . 1 B	C055 . . . . 1 A	VR009 . . 1 B
R077 . . . . 1 A	C056 . . . . 1 B	
R078 . . . . 1 A		



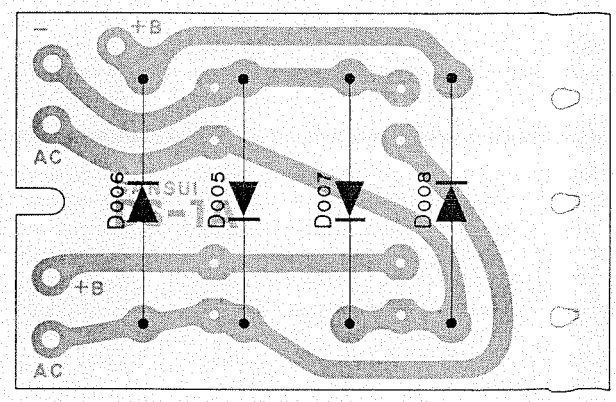


POWER SUPPLY DIODE BRIDGE (DS-1A〈a〉)

D001	D003
D002	D004

HEATER POWER SUPPLY DIODE BRIDGE (DS-1A〈b〉)

D005	D007
D006	D008



PARTS LIST

A: Part No.
B: Part Name
C: Position of Parts in Circuit Diagram
D: Position of Parts on Parts Layouts and Name of Printed Circuit

A	B	C	D
R001	470KΩ ½W ±10% Solid Fixed Resistor	5 A	TRCF-3(A)
R002	470KΩ ½W ±10% Solid Fixed Resistor	5 C	TRCF-3(A)
R003	220KΩ ½W ±10% Solid Fixed Resistor	5 A	TRCF-3(A)
R004	220KΩ ½W ±10% Solid Fixed Resistor	5 C	TRCF-3(A)
R005	6.8KΩ ½W ±10% Solid Fixed Resistor	5 A	TRCF-3(A)
R006	6.8KΩ ½W ±10% Solid Fixed Resistor	5 C	TRCF-3(A)
R007	120Ω ½W ±10% Solid Fixed Resistor	5 A	TRCF-3(A)
R008	120Ω ½W ±10% Solid Fixed Resistor	5 C	TRCF-3(A)
R009	180KΩ ½W ±10% Solid Fixed Resistor	5 A	TRCF-3(A)
R010	180KΩ ½W ±10% Solid Fixed Resistor	5 C	TRCF-3(A)
R011	100KΩ ½W ±10% Solid Fixed Resistor	5 A	TRCF-3(A)
R012	100KΩ ½W ±10% Solid Fixed Resistor	5 C	TRCF-3(A)
R013	15KΩ ¼W ±10% Carbon Fixed Resistor	5 B	TRCF-2(A)
R014	15KΩ ¼W ±10% Carbon Fixed Resistor	5 D	TRCF-2(A)
R015	6.8KΩ ½W ±10% Solid Fixed Resistor	5 A	TRCF-3(A)
R016	6.8KΩ ½W ±10% Solid Fixed Resistor	5 C	TRCF-3(A)
R017	39KΩ ½W ±10% Solid Fixed Resistor	5 A	TRCF-3(A)
R018	39KΩ ½W ±10% Solid Fixed Resistor	5 C	TRCF-3(A)
R019	27KΩ ½W ±10% Solid Fixed Resistor	5 A	TRCF-3(A)
R020	27KΩ ½W ±10% Solid Fixed Resistor	5 C	TRCF-3(A)
R021	6.8KΩ ½W ±10% Solid Fixed Resistor	5 A	TRCF-3(A)
R022	6.8KΩ ½W ±10% Solid Fixed Resistor	5 C	TRCF-3(A)
R023	15KΩ ½W ±10% Solid Fixed Resistor	6 A	TRCF-3(A)
R024	15KΩ ½W ±10% Solid Fixed Resistor	6 C	TRCF-3(A)
R025	39KΩ ½W ±10% Solid Fixed Resistor	6 A	TRCF-3(A)
R026	39KΩ ½W ±10% Solid Fixed Resistor	6 C	TRCF-3(A)
R027	25KΩ ¼W ±10% Carbon Fixed Resistor	6 B	TRCF-2(A)
R028	25KΩ ¼W ±10% Carbon Fixed Resistor	6 D	TRCF-2(A)
R029	6.8KΩ ½W ±10% Solid Fixed Resistor	6 A	TRCF-3(A)
R030	6.8KΩ ½W ±10% Solid Fixed Resistor	6 C	TRCF-3(A)
R031	15KΩ ½W ±10% Solid Fixed Resistor	6 A	TRCF-3(A)
R032	15KΩ ½W ±10% Solid Fixed Resistor	6 C	TRCF-3(A)
R033	6.8KΩ ½W ±10% Solid Fixed Resistor	6 A	TRCF-3(A)
R034	6.8KΩ ½W ±10% Solid Fixed Resistor	6 C	TRCF-3(A)
R035	1KΩ ½W ±10% Solid Fixed Resistor	6 A	TRCF-3(A)
R036	1KΩ ½W ±10% Solid Fixed Resistor	6 C	TRCF-3(A)
R037	1KΩ ½W ±10% Solid Fixed Resistor	6 B	TRCF-3(A)
R038	1KΩ ½W ±10% Solid Fixed Resistor	6 D	TRCF-3(A)
R039	120Ω ½W ±10% Solid Fixed Resistor	5 B	TRCF-3(B)
R040	120Ω ½W ±10% Solid Fixed Resistor	5 D	TRCF-3(B)
R041	15KΩ ¼W ±10% Carbon Fixed Resistor	5 B	TRCF-2(B)
R042	15KΩ ¼W ±10% Carbon Fixed Resistor	5 E	TRCF-2(B)
R043	180KΩ ½W ±10% Solid Fixed Resistor	5 B	TRCF-3(B)
R044	180KΩ ½W ±10% Solid Fixed Resistor	5 D	TRCF-3(B)
R045	100KΩ ½W ±10% Solid Fixed Resistor	5 B	TRCF-3(B)
R046	100KΩ ½W ±10% Solid Fixed Resistor	5 D	TRCF-3(B)
R047	6.8KΩ ½W ±10% Solid Fixed Resistor	5 B	TRCF-3(B)
R048	6.8KΩ ½W ±10% Solid Fixed Resistor	5 D	TRCF-3(B)
R049	39KΩ ½W ±10% Solid Fixed Resistor	3 B	TRCF-3(B)
R050	39KΩ ½W ±10% Solid Fixed Resistor	5 D	TRCF-3(B)
R051	27KΩ ½W ±10% Solid Fixed Resistor	5 B	TRCF-3(B)
R052	27KΩ ½W ±10% Solid Fixed Resistor	5 D	TRCF-3(B)
R053	6.8KΩ ½W ±10% Solid Fixed Resistor	5 B	TRCF-3(B)
R054	6.8KΩ ½W ±10% Solid Fixed Resistor	5 D	TRCF-3(B)
R055	15KΩ ½W ±10% Solid Fixed Resistor	6 B	TRCF-3(B)
R056	15KΩ ½W ±10% Solid Fixed Resistor	6 D	TRCF-3(B)
R057	39KΩ ½W ±10% Solid Fixed Resistor	6 B	TRCF-3(B)
R058	39KΩ ½W ±10% Solid Fixed Resistor	6 D	TRCF-3(B)

A	B	C	D
R059	25KΩ ¼W ±10% Carbon Fixed Resistor	6 B	TRCF-2(B)
R060	25KΩ ¼W ±10% Carbon Fixed Resistor	6 D	TRCF-2(B)
R061	6.8KΩ ½W ±10% Solid Fixed Resistor	6 B	TRCF-3(B)
R062	6.8KΩ ½W ±10% Solid Fixed Resistor	6 D	TRCF-3(B)
R063	15KΩ ½W ±10% Solid Fixed Resistor	6 B	TRCF-3(B)
R064	15KΩ ½W ±10% Solid Fixed Resistor	6 D	TRCF-3(B)
R065	6.8KΩ ½W ±10% Solid Fixed Resistor	6 B	TRCF-3(B)
R066	6.8KΩ ½W ±10% Solid Fixed Resistor	6 D	TRCF-3(B)
R067	1KΩ ½W ±10% Solid Fixed Resistor	6 B	TRCF-3(B)
R068	1KΩ ½W ±10% Solid Fixed Resistor	6 D	TRCF-3(B)
R069	1KΩ ½W ±10% Solid Fixed Resistor	6 B	TRCF-3(B)
R070	1KΩ ½W ±10% Solid Fixed Resistor	6 E	TRCF-3(B)
R071	47KΩ ¼W ±10% Carbon Fixed Resistor	1 B	TROSC
R072	470KΩ ¼W ±10% Carbon Fixed Resistor	1 B	TROSC
R073	3.9KΩ ¼W ±10% Carbon Fixed Resistor	1 C	TROSC
R074	82Ω ¼W ±10% Carbon Fixed Resistor	2 B	TROSC
R075	3.9KΩ ¼W ±10% Carbon Fixed Resistor	1 B	TROSC
R076	10KΩ ¼W ±10% Carbon Fixed Resistor	2 B	TROSC
R077	1KΩ ¼W ±10% Carbon Fixed Resistor	2 B	TROSC
R078	25KΩ ¼W ±10% Carbon Fixed Resistor	2 C	TROSC
R079	1.5KΩ ¼W ±10% Carbon Fixed Resistor	2 B	TROSC
R080	1KΩ ¼W ±10% Carbon Fixed Resistor	2 B	TROSC
R081	47Ω 2 W ±10% Carbon Fixed Resistor	1 D	Power Supply Block
R082	1KΩ 1 W ±10% Carbon Fixed Resistor	2 D	Power Supply Block
R083	1KΩ 1 W ±10% Carbon Fixed Resistor	2 D	Power Supply Block
R084	2.2KΩ 1 W ±10% Carbon Fixed Resistor	2 D	Power Supply Block
R085	4.7KΩ ½W ±10% Carbon Fixed Resistor	2 D	Power Supply Block
R086	15KΩ ½W ±10% Carbon Fixed Resistor	2 D	Power Supply Block
R087	20Ω 10W ±10% Cement Resistor	2 E	Power Supply Block
R088	120Ω ½W ±10% Carbon Fixed Resistor	2 E	Power Supply Block
R089	68Ω ½W ±10% Carbon Fixed Resistor	2 E	Power Supply Block
R090	1KΩ ¼W ±10% Carbon Fixed Resistor	2 E	Power Supply Block
R601	47KΩ ¼W ±10% Carbon Fixed Resistor	1 A	PU601
R602	47KΩ ¼W ±10% Carbon Fixed Resistor	1 C	PU602
R603	Composite Resistor PU-R	1 B	S2a
605			
607			
609			
611			
613			
R604	Composite Resistor PU-R	1 D	S2b
606			
608			
610			
612			
614			
R615	470KΩ ¼W ±10% Carbon Fixed Resistor	2 A	S1a
R616	470KΩ ¼W ±10% Carbon Fixed Resistor	2 C	S1g
R617	1.5KΩ ¼W ±10% Carbon Fixed Resistor	2 A	PRE-CR Block
R618	1.5KΩ ¼W ±10% Carbon Fixed Resistor	2 C	PRE-CR Block
R619	4.7KΩ ½W ±10% Carbon Fixed Resistor	2 A	PRE-CR Block
R620	4.7KΩ ½W ±10% Carbon Fixed Resistor	2 C	PRE-CR Block
R621	270KΩ ½W ±10% Carbon Fixed Resistor	2 A	PRE-CR Block
R622	270KΩ ½W ±10% Carbon Fixed Resistor	2 C	PRE-CR Block
R623	1MΩ ¼W ±10% Carbon Fixed Resistor	2 A	PRE-CR Block

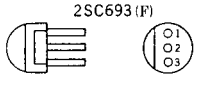
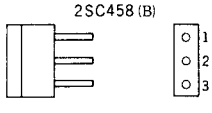
A	B	C	D
R624	1MΩ ¼W ±10% Carbon Fixed Resistor	2 C	PRE-CR Block
R625	2.2KΩ ¼W ±10% Carbon Fixed Resistor	2 A	PRE-CR Block
R626	2.2KΩ ¼W ±10% Carbon Fixed Resistor	2 C	PRE-CR Block
R627	270KΩ ½W ±10% Carbon Fixed Resistor	2 A	PRE-CR Block
R628	270KΩ ½W ±10% Carbon Fixed Resistor	2 C	PRE-CR Block
R629	47KΩ ½W ±10% Carbon Fixed Resistor	2 A	PRE-CR Block
R630	47KΩ ½W ±10% Carbon Fixed Resistor	2 C	PRE-CR Block
R631	1MΩ ¼W ±10% Carbon Fixed Resistor	2 A	PRE-CR Block
R632	1MΩ ¼W ±10% Carbon Fixed Resistor	2 C	PRE-CR Block
R633	1KΩ ¼W ±10% Carbon Fixed Resistor	2 A	S1 (c,e)
R634	1KΩ ¼W ±10% Carbon Fixed Resistor	2 C	S1 (i, k)
R635	1.5MΩ ¼W ±10% Cabron Fixed Resistor	2 B	S1 (c,d)
R636	1.5MΩ ¼W ±10% Carbon Fixed Resistor	2 C	S1 (i, j)
R637	100KΩ ¼W ±10% Carbon Fixed Resistor	2 B	S1 (c,d)
R638	100KΩ ¼W ±10% Carbon Fixed Resistor	2 C	S1 (i, j)
R639	1KΩ ¼W ±10% Carbon Fixed Resistor	2 B	S1 (c,d)
R640	1KΩ ¼W ±10% Carbon Fixed Resistor	2 C	S1 (i, j)
R641	10MΩ ¼W ±10% Carbon Fixed Resistor	2 B	S1 (c,d)
R642	10MΩ ¼W ±10% Carbon Fixed Resistor	2 D	S1 (i, j)
R643	82KΩ ¼W ±10% Carbon Fixed Resistor	2 B	S1 (c,d)
R644	82KΩ ¼W ±10% Carbon Fixed Resistor	2 C	S1 (i, j)
R645	27KΩ ¼W ±10% Carbon Fixed Resistor	2 B	S1 (c,d)
R646	27KΩ ¼W ±10% Carbon Fixed Resistor	2 D	S1 (i, j)
R647	120KΩ ¼W ±10% Carbon Fixed Resistor	2 B	S1 (c,d)
R648	120KΩ ¼W ±10% Carbon Fixed Resistor	2 D	S1 (i, j)
R701	1.5MΩ ¼W ±10% Carbon Fixed Resistor	3 B	S6a
R702	1.5MΩ ¼W ±10% Carbon Fixed Resistor	3 C	S6b
R703	4.7KΩ ½W ±10% Carbon Fixed Resistor	3 A	PRE-CR Block
R704	4.7KΩ ½W ±10% Carbon Fixed Resistor	3 C	PRE-CR Block
R705	270KΩ ½W ±10% Carbon Fixed Resistor	3 A	PRE-CR Block
R706	270KΩ ½W ±10% Carbon Fixed Resistor	3 C	PRE-CR Block
R707	1MΩ ¼W ±10% Carbon Fixed Resistor	3 A	PRE-CR Block
R708	1MΩ ¼W ±10% Carbon Fixed Resistor	3 C	PRE-CR Block
R709	1.2KΩ ¼W ±10% Carbon Fixed Resistor	3 A	PRE-CR Block
R710	1.2KΩ ¼W ±10% Carbon Fixed Resistor	3 C	PRE-CR Block
R711	100KΩ ½W ±10% Carbon Fixed Resistor	3 A	PRE-CR Block
R712	100KΩ ½W ±10% Carbon Fixed Resistor	3 C	PRE-CR Block
R713	1MΩ ¼W ±10% Carbon Fixed Resistor	3 B	S8a
R714	1MΩ ¼W ±10% Carbon Fixed Resistor	3 D	S8c
R715	18KΩ ¼W ±10% Carbon Fixed Resistor	3 B	S8a
R716	18KΩ ¼W ±10% Carbon Fixed Resistor	3 D	S8c
R717	6.8KΩ ¼W ±10% Carbon Fixed Resistor	3 B	S8a
R718	6.8KΩ ¼W ±10% Carbon Fixed Resistor	3 D	S8c
R719	3.9KΩ ¼W ±10% Carbon Fixed Resistor	3 B	S8a
R720	3.9KΩ ¼W ±10% Carbon Fixed Resistor	3 D	S8c
R721	2.7KΩ ¼W ±10% Carbon Fixed Resistor	3 B	S8a
R722	2.7KΩ ¼W ±10% Carbon Fixed Resistor	3 D	S8c
R723	1.5KΩ ¼W ±10% Carbon Fixed Resistor	3 B	S8a
R724	1.5KΩ ¼W ±10% Carbon Fixed Resistor	3 D	S8c
R725	1KΩ ¼W ±10% Carbon Fixed Resistor	3 B	S8a
R726	1KΩ ¼W ±10% Carbon Fixed Resistor	3 D	S8c
R727	22KΩ ¼W ±10% Carbon Fixed Resistor	4 B	S10a
R728	22KΩ ¼W ±10% Carbon Fixed Resistor	4 D	S10c
R729	47KΩ ¼W ±10% Carbon Fixed Resistor	4 B	S10a
R730	47KΩ ¼W ±10% Carbon Fixed Resistor	4 D	S10c
R731	82KΩ ¼W ±10% Carbon Fixed Resistor	4 B	S10a
R732	82KΩ ¼W ±10% Carbon Fixed Resistor	4 D	S10c

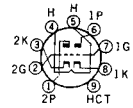
A	B	C	D
R733	150KΩ ¼W ±10% Carbon Fixed Resistor	4 B	S10a
R734	150KΩ ¼W ±10% Carbon Fixed Resistor	4 D	S10c
R735	270KΩ ¼W ±10% Carbon Fixed Resistor	4 B	S10a
R736	270KΩ ¼W ±10% Carbon Fixed Resistor	4 D	S10c
R737	470KΩ ¼W ±10% Carbon Fixed Resistor	4 B	S10a
R738	470KΩ ¼W ±10% Carbon Fixed Resistor	4 D	S10c
R739	68KΩ ¼W ±10% Carbon Fixed Resistor	3 B	S7c–S9a
R740	68KΩ ¼W ±10% Carbon Fixed Resistor	3 D	S7c–S9c
R741	560KΩ ¼W ±10% Carbon Fixed Resistor	4 B	S10a
R742	560KΩ ¼W ±10% Carbon Fixed Resistor	4 D	S10c
R743	220KΩ ¼W ±10% Carbon Fixed Resistor	3 B	S8b
R744	220KΩ ¼W ±10% Carbon Fixed Resistor	3 D	S8d
R745	82KΩ ¼W ±10% Carbon Fixed Resistor	3 B	S8b
R746	82KΩ ¼W ±10% Carbon Fixed Resistor	3 D	S8c
R747	47KΩ ¼W ±10% Carbon Fixed Resistor	3 B	S8b
R748	47KΩ ¼W ±10% Carbon Fixed Resistor	3 D	S8c
R749	27KΩ ¼W ±10% Carbon Fixed Resistor	3 B	S8b
R750	27KΩ ¼W ±10% Carbon Fixed Resistor	3 D	S8d
R751	18KΩ ¼W ±10% Carbon Fixed Resistor	4 B	S10b
R752	18KΩ ¼W ±10% Carbon Fixed Res stor	4 D	S10d
R753	39KΩ ¼W ±10% Carbon Fixed Resistor	4 B	S10b
R754	39KΩ ¼W ±10% Carbon Fixed Resistor	4 D	S10d
R755	56KΩ ¼W ±10% Carbon Fixed Resistor	4 B	S10b
R756	56KΩ ¼W ±10% Carbon Fixed Resistor	4 D	S10d
R757	100KΩ ¼W ±10% Carbon Fixed Resistor	4 B	S10b
R758	100KΩ ¼W ±10% Carbon Fixed Resistor	4 D	S10d
R759	Composite Resistor LF-1	4 A	S11a
R760	Composite Resistor LF-1	4 C	S11b
R761	330KΩ ¼W ±10% Carbon Fixed Resistor	4 A	PRECR Block
R762	330KΩ ¼W ±10% Carbon Fixed Resistor	4 C	PRECR Block
R763	820KΩ ¼W ±10% Carbon Fixed Resistor	4 A	PRECR Block
R764	820KΩ ¼W ±10% Carbon Fixed Resistor	4 C	PRECR Block
R765	82KΩ ¼W ±10% Carbon Fixed Resistor	4 A	PRECR Block
R766	82KΩ ¼W ±10% Carbon Fixed Resistor	4 C	PRECR Block
R767	180KΩ ¼W ±10% Carbon Fixed Resistor	4 A	PRECR Block
R768	180KΩ ¼W ±10% Carbon Fixed Resistor	4 C	PRECR Block
R769	4.7MΩ ¼W ±10% Carbon Fixee Resistor	4 A	S12a
R770	4.7MΩ ¼W ±10% Carbon Fixee Resistor	4 C	S12b
R771	10KΩ ½W ±10% Carbon Fixee Resistor	4 A	PRECR Block
R772	10KΩ ½W ±10% Carbon Fixed Resistor	4 C	PRECR Block
R773	1MΩ ¼W ±10% Carbon Fixed Resistor	4 A	PRECR Block
R774	1MΩ ¼W ±10% Carbon Fixed Resistor	4 C	PRECR Block
C001	3μF 25WV +100% Electrolytic Capacitor	5 A	TRCF-3(A)
C002	3μF 25WV +100% Electrolytic Capacitor	5 C	TRCF-3(A)
C003	100pF 250WV ±10% Ceramic Capactor	5 A	TRCF-3(A)
C004	100pF 250WV ±10% Ceramic Capactor	5 C	TRCF-3(A)
C005	0.0015μF 50WV ±10% Mylar Capacitor	5 B	TRCF-2(A)
C006	0.0015μF 50WV ±10% Mylar Capacitor	5 D	TRCF-2(A)
C007	0.0015μF 50WV ±10% Mylar Capacitor	5 B	TRCF-2(A)
C008	0.0015μF 50WV ±10% Mylar Capacitor	5 D	TRCF-2(A)
C009	0.003μF 50WV ±10% Mylar Capacitor	5 B	TRCF-2(A)
C010	0.003μF 50WV ±10% Mylar Capacitor	5 D	TRCF-2(A)
C011	100pF 250WV ±10% Ceramic Capactor	6 A	TRCF-3(A)
C012	100pF 250WV ±10% Ceramic Capactor	6 C	TRCF-3(A)
C013	0.006μF 50WV ±10% Mylar Capacitor	6 B	TRCF-2(A)
C014	0.006μF 50WV ±10% Mylar Capacitor	6 D	TRCF-2(A)
C015	0.0015μF 50WV ±10% Mylar Capacitor	6 B	TRCF-2(A)

PARTS LIST

A : Part No.
B : Part Name
C : Position of Part in Circuit Diagram
D : Position of Parts on Parts Layout and Name of Prited Circuit

A	B	C	D
C016	0.0015μF 50WV ±10% Mylar Capacitor	6 D	TRCF-2(A)
C017	0.003μF 50WV ±10% Mylar Capacitor	6 B	TRCF-2(A)
C018	0.003μF 50WV ±10% Mylar Capacitor	6 D	TRCF-2(A)
C019	1μF 25WV +100% Electrolytic Capacitor	6 B	TRCF-3(A)
C020	1μF 25WV +100% Electrolytic Capacitor	6 D	TRCF-3(A)
C021	3μF 25WV +100% Electrolytic Capacitor	6 A	TRCF-3(A)
C022	3μF 25WV +100% Electrolytic Capacitor	6 C	TRCF-3(A)
C023	25μF 50WV +100% Electrelytic Capacitor	6 A	TRCF-3(A)
C024	25μF 50WV +100% Electrolytic Capacitor	6 C	TRCF-3(A)
C025	0.01μF 50WV ±10% Mylar Capacitor	5 B	TRCF-2(B)
C026	0.01μF 50WV ±10% Mylar Capacitor	5 D	TRCF-2(B)
C027	0.01μF 50WV ±10% Mylar Capacitor	5 B	TRCF-2(B)
C028	0.01μF 50WV ±10% Mylar Capacitor	5 D	TRCF-2(B)
C029	0.02μF 50WV ±10% Mylar Capacitor	5 B	TRCF-2(B)
C030	0.02μF 50WV ±10% Mylar Capacitor	5 D	TRCF-2(B)
C031	100 pF 250WV ±10% Ceramic Capactior	5 B	TRCF-3(B)
C032	100 pF 250WV ±10% Ceramic Capacitor	5 D	TRCF-3(B)
C033	100 pF 250WV ±10% Ceramic Capacitor	6 B	TRCF-3(B)
C034	100 pF 250WV ±10% Ceramic Capacitor	6 D	TRCF-3(B)
C035	0.01μF 50WV ±10% Mylar Capacitor	6 B	TRCF-2(B)
C036	0.01μF 50WV ±10% Mylar Capacitor	6 D	TRCF-2(B)
C037	0.04μF 50WV ±10% Mylar Capacitor	6 B	TRCF-2(B)
C038	0.04μF 50WV ±10% Mylar Capacitor	6 E	TRCF-2(B)
C039	0.02μF 50WV ±10% Mylar Capacitor	6 B	TRCF-2(B)
C040	0.02μF 50WV ±10% Mylar Capacitor	6 D	TRCF-2(B)
C041	3μF 25WV +100% Electrolytic Capacitor	6 B	TRCF-3(B)
C042	3μF 25WV +100% Electrolytic Capacitor	6 E	TRCF-3(B)
C043	3μF 25WV +100% Electrolytic Capacitor	6 B	TRCF-3(B)
C044	3μF 25WV +100% Electrolytic Capacitor	6 D	TRCF-3(B)
C045	25μF 50WV +100% Electrolytic Capacitor	6 B	TRCF-3(B)
C046	25μF 50WV +100% Electrolytic Capacitor	6 D	TRCF-3(B)
C047	0.15μF 50WV ±10% Mylar Capacitor	2 C	S3
C048	0.015μF 50WV ±10% Mylar Capacitor	2 C	S3
C049	0.0015μF 50WV ±10% Mylar Capacitor	2 C	S3
C050	0.15μF 50WV ±10% Mylar Capacitor	2 C	S3
C051	0.015μF 50WV ±10% Mylar Capacitor	2 C	S3
C052	0.0015μF 50WV ±10% Mylar Capacitor	2 C	S3
C053	10μF 10WV +100% Electrolytic Capacitor	2 B	TROSC
C054	50μF 10WV +100% Electrolytic Capacitor	2 B	TROSC
C055	10μF 10WV +100% Electrolytic Capacitor	2 B	TROSC
C056	10μF 10WV +100% Electrolytic Capacitor	2 B	TROSC
C057, 058	40μF×2 450WV +100% Electrolytic Capacitor (block-type)	2 D	Power Supply Block
C059~062	20μF×4 350WV +100% Electrolytic Capacitor (block-type)	2 D	Power Supply Block
C063	2000μF 50WV +100% Electrolytic Capacitor	2 E	Power Supply Block
C064	2000μF 50WV +100% Electrolytic Capacitor	2 E	Power Supply Block
C065	600μF 40WV +100% Electrolytic Capacitor	2 E	Power Supply Block
C066	600μF 40WV +100% Electrolytic Capacitor	2 E	Power Supply Block
C067	25μF 50WV +100% Electrolytic Capacitor	2 E	Power Supply Block
C068	500 pF 250WV ±10% Ceramic Capacitor	6 A	TRCF-3(A)
C069	500 pF 250WV ±10% Ceramic Capacitor	6 C	TRCF-3(A)
C070	500 pF 250WV ±10% Ceramic Capacitor	6 B	TRCF-3(B)
C071	500 pF 250WV ±10% Ceramic Capacitor	6 D	TRCF-3(B)
C072	3μF 25WV +100% Electrolytic Capacitor	1 B	TROSC
C601	50 pF 250WV ±10% Ceramic Capacitor	2 A	PRE-CR Block
C602	50 pF 250WV ±10% Ceramic Capacitor	2 C	PRE-CR Block
C603	100μF 15WV +100% Electrolytic Capacitor	2 A	PRE-CR Block
C604	100μF 15WV +100% Electrolytic Capacitor	2 C	PRE-CR Block
C605	0.01μF 400WV ±10% Oil Capacitor	2 A	PRE-CR Block
C606	0.01μF 400WV ±10% Oil Capacitor	2 C	PRE-CR Block
C607	30 pF 250WV ±10% Mica Capacitor	2 A	PRE-CR Block
C608	30 pF 250WV ±10% Mica Capacitor	2 C	PRE-CR Block
C609	100μF 15WV +100% Electrolytic Capacitor	2 A	PRE-CR Block
C610	100μF 15WV +100% Electrolytic Capacitor	2 C	PRE-CR Block
C611	0.5μF 400WV ±10% Oil Capacitor	2 A	PRE-CR Block
C612	0.5μF 400WV ±10% Oil Capacitor	2 C	PRE-CR Block
C613	2700 pF 50WV ±10% Mica Capacitor	2 B	S1(c,d)
C614	2700 pF 50WV ±10% Mica Capacitor	2 C	S1(i, j)
C615	1000 pF 50WV ±10% Mica Capacitor	2 B	S1(c,d)
C616	1000 pF 50WV ±10% Mica Capacitor	2 C	S1(i, j)
C617	750 pF 50WV ±10% Mica Capacitor	2 B	S1(c,d)
C618	750 pF 50WV ±10% Mica Capacitor	2 C	S1(i, j)
C701	0.01μF 400WV ±10% Oil Capacitor	3 A	PRE-CR Block
C702	0.01μF 400WV ±10% Oil Capacitor	3 C	PRE-CR Block
C703	0.2μF 400WV ±10% Oil Capacitor	3 A	PRE-CR Block
C704	0.2μF 400WV ±10% Oil Capacitor	3 C	PRE-CR Block
C705	0.005μF 50WV ±10% Mylar Capacitor	3 B	S7a
C706	0.005μF 50WV ±10% Mylar Capacitor	3 D	S7c
C707	0.01μF 50WV ±10% Mylar Capacitor	3 B	S7a
C708	0.01μF 50WV ±10% Mylar Capacitor	3 D	S7c
C709	0.02μF 50WV ±10% Mylar Capacitor	3 B	S7a
C710	0.02μF 50WV ±10% Mylar Capacitor	3 D	S7c
C711	0.004μF 50WV ±10% Mylar Capacitor	4 B	S9a
C712	0.004μF 50WV ±10% Mylar Capacitor	4 D	S9c
C713	0.007μF 50WV ±10% Mylar Capacitor	4 B	S9a
C714	0.007μF 50WV ±10% Mylar Capacitor	4 D	S9c
C715	0.015μF 50WV ±10% Mylar Capacitor	4 B	S9a
C716	0.015μF 50WV ±10% Mylar Capacitor	4 D	S9c
C717	250 pF 50WV ±10% Mica Capacitor	3 B	S7b
C718	250 pF 50WV ±10% Mica Capacitor	3 D	S7d
C719	500 pF 50WV ±10% Mica Capacitor	3 B	S7b
C720	500 pF 50WV ±10% Mica Capacitor	3 D	S7d
C721	0.001μF 50WV ±10% Mylar Capacitor	3 B	S7b
C722	0.001μF 50WV ±10% Mylar Capacitor	3 D	S7d
C723	0.005μF 50WV ±10% Mylar Capacitor	4 B	S9b
C724	0.005μF 50WV ±10% Mylar Capacitor	4 D	S9d
C725	0.01μF 50WV ±10% Mylar Capacitor	4 B	S9b
C726	0.01μF 50WV ±10% Mylar Capacitor	4 D	S9d
C727	0.02μF 50WV ±10% Mylar Capacitor	4 B	S9b
C728	0.02μF 50WV ±10% Mylar Capacitor	4 D	S9d
C729	0.5μF 50WV ±10% Mylar Capacitor	4 B	S9b
C730	0.5μF 50WV ±10% Mylar Capacitor	4 D	S9d
C731 733 735 737	Composite Resistor LF-1	3 A	S11a

A	B	C	D
C732, 734, 736, 738	Composite Resistor LF-1	3 C	S11b
C739	0.2μF 250WV ±10% Mylar Capacitor	3 A	S11a
C740	0.2μF 250WV ±10% Mylar Capacitor	3 C	S11b
C741, 743	Composite Resistor HF-1	4 A	S12a
C742, 744	Composite Resistor HF-1	4 C	S12b
C745, 747	Composite Resistor HF-2	4 A	S12a
C746, 748	Composite Resistor HF-2	4 C	S12b
C749	0.5μF 400WV ±10% Oil Capacitor	4 A	PRE-CR Block
C750	0.5μF 400WV ±10% Oil Capacitor	4 C	PRE-CR Block
TR001	2SC693(F) SiN-P-N Planar Transistor	5 A	TRCF-3(A)
TR002	2SC693(F) SiN-P-N Planar Transistor	5 C	TRCF-3(A)
TR003	2SC693(F) SiN-P-N Planar Transistor	5 A	TRCF-3(A)
TR004	2SC693(F) SiN-P-N Planar Transistor	5 C	TRCF-3(A)
TR005	2SC693(F) SiN-P-N Planar Transistor	5 A	TRCF-3(A)
TR006	2SC693(F) SiN-P-N Planar Transistor	5 C	TRCF-3(A)
TR007	2SC693(F) SiN-P-N Planar Transistor	6 A	TRCF-3(A)
TR008	2SC693(F) SiN-P-N Planar Transistor	6 C	TRCF-3(A)
TR009	2SC693(F) SiN-P-N Planar Transistor	6 A	TRCF-3(A)
TR010	2SC693(F) SiN-P-N Planar Transistor	6 C	TRCF-3(A)
TR011	2SC693(F) SiN-P-N Planar Transistor	5 B	TRCF-3(B)
TR012	2SC693(F) SiN-P-N Planar Transistor	5 D	TRCF-3(B)
TR013	2SC693(F) SiN-P-N Planar Transistor	5 B	TRCF-3(B)
TR014	2SC693(F) SiN-P-N Planar Transistor	5 D	TRCF-3(B)
TR015	2SC693(F) SiN-P-N Planar Transistor	6 B	TRCF-3(B)
TR016	2SC693(F) SiN-P-N Planar Transistor	6 D	TRCF-3(B)
TR017	2SC693(F) SiN-P-N Planar Transistor	6 B	TRCF-3(B)
TR018	2SC693(F) SiN-P-N Planar Transistor	6 D	TRCF-3(B)
TR019	2SC458(B) SiN-P-N Planar Transistor	2 B	TROSC
TR020	2SC458(B) SiN-P-N Planar Transistor	2 B	TROSC
	2SC693(F)  1 – Base (B) 2 – Collector (C) 3 – Emitter (E)		
	2SC458(B) 		
D001	SW-0.5d Silicon Diode for Rectification	1 D	DSIA(a)
D002	SW-0.5d Silicon Diode for Rectification	1 D	DSIA(a)
D003	SW-0.5d Silicon Diode for Rectification	1 D	DSIA(a)
D004	SW-0.5d Silicon Diode for Rectification	1 D	DSIA(a)
D005	SW-1a Silicon Diode for Rectification	1 E	DSIA(b)
D006	SW-1a Silicon Diode for Rectification	1 E	DSIA(b)
D007	SW-1a Silicon Diode for Rectification	1 E	DSIA(b)
D008	SW-1a Silicon Diode for Rectification	1 E	DSIA(b)
V601, 603	½12AX7	2^{A}_{C}	V601, 603
V602, 604	½12AX7	2^{A}_{C}	V602, 604
V605, 606	½12AT7	2^{A}_{C}	V605, 606
V701, 703	½12AX7	3^{A}_{C}	V701, 703

A	B	C	D
V702, 704	½12AX7	3^{A}_{C}	V702, 704
V705, 706	½12AT7	4^{A}_{C}	V705, 706
	12AX7, 12AT7  H — Heater HCT — Heater Center Tap G — Grid K — Cathode P — Plate		
VR001, 007	50KΩ × 2(B) Variable Resistor (2-gang) 16φ	6^{A}_{B}	VR001, 007
VR002, 008	50KΩ × 2(B) Variable Resistor (2-gang) 16φ	6^{C}_{D}	VR002, 008
VR003	50KΩ(B) Variable Resistor (1-gang) 16φ	6 B	VR003
VR004	50KΩ(B) Variable Resistor (1-gang) 16φ	6 D	VR004
VR005	50KΩ(B) Variable Resistor (1-gang) 16φ	6 B	VR005
VR006	50KΩ(B) Variable Resistor (1-gang) 16φ	6 D	VR006
VR009	100KΩ(B) Variable Resistor	2 B	TROSC
VR601	100KΩ(B) Variable Resistor (1-gang) 16φ	2 B	VR601
VR602	100KΩ(B) Variable Resistor (1-gang) 16φ	2 C	VR602
VR701, 702	250KΩ × 2(A,C) Variable Resistor (2-gang) 24φ	2^{A}_{C}	VR701, 702
VR703	100KΩ(B) Variable Resistor (1-gang) 16φ	4 A	VR703
VR704	100KΩ(B) Variable Resistor (1-gang) 16φ	4 C	VR704
AT701, 702	250KΩ × 2(2dB × 20, ⏦) Attenuator	3^{A}_{C}	AT701, 702
S1(a~k)	Rotary Switch 110-1-5264	1^{A} 2^{B}_{C} 3^{D}	S1(a~k)
S2(a~b)	Lever Switch 117-2-5264	1^{A}_{D}	S2(a, b)
S3	Lever Switch 117-2-5264	2 C	S3
S4	Lever Switch 117-1-5264	3^{B}_{C}	S4
S5(a~b)	Rotary Switch 110-2-5264	3^{B}_{C}	S5(a, b)
S6(a~b)	Lever Switch 117-1-5264	3^{B}_{C}	S6(a, b)
S7(a~d)	Rotary Switch 110-4-5264	3^{B}_{D}	S7(a~d)
S8(a~d)	Rotary Switch 110-3-5264	3^{B}_{D}	S8(a~d)
S9(a~d)	Rotary Switch 110-4-5264	4^{B}_{D}	S9(a~d)
S10(a~d)	Rotary Switch 110-3-5264	4^{B}_{D}	S10(a~d)
S11(a~b)	Lever Switch 117-2-5264	4^{A}_{C}	S11(a, b)
S12(a~b)	Lever Switch 117-2-5264	4^{A}_{C}	S12(a, b)
S13	Lever Switch 117-3-5264	1 E	S13
CO001	AC Outlet	1 E	CO001
CO002	AC Outlet	1 E	CO002
CO003	AC Outlet	1 E	CO003
CO004	AC Outlet	1 E	CO004
CO005	AC Outlet	1 E	CO005
CO006	AC Outlet	1 E	CO006
CO007	AC Outlet	1 E	CO007
F001	Fuse 1 A	1 D	F001
PL001	Pilot Lamp 120 V	2 B	TROSC
PL002	Pilot Lamp 12 V	1 D	PL002
J601	Coaxial Single-Head Triple-Pole Jack	1 A	J601
J602	Coaxial Single-Head Triple-Pole Jack	1 C	J602
T001	Power Transformer 400-5264	1^{D}_{E}	T001
PU601	9-Pin Plug	1 A	PU601
PU602	9-Pin Plug	1 C	PU602

Sansui®

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Printed in Japan (78500M)